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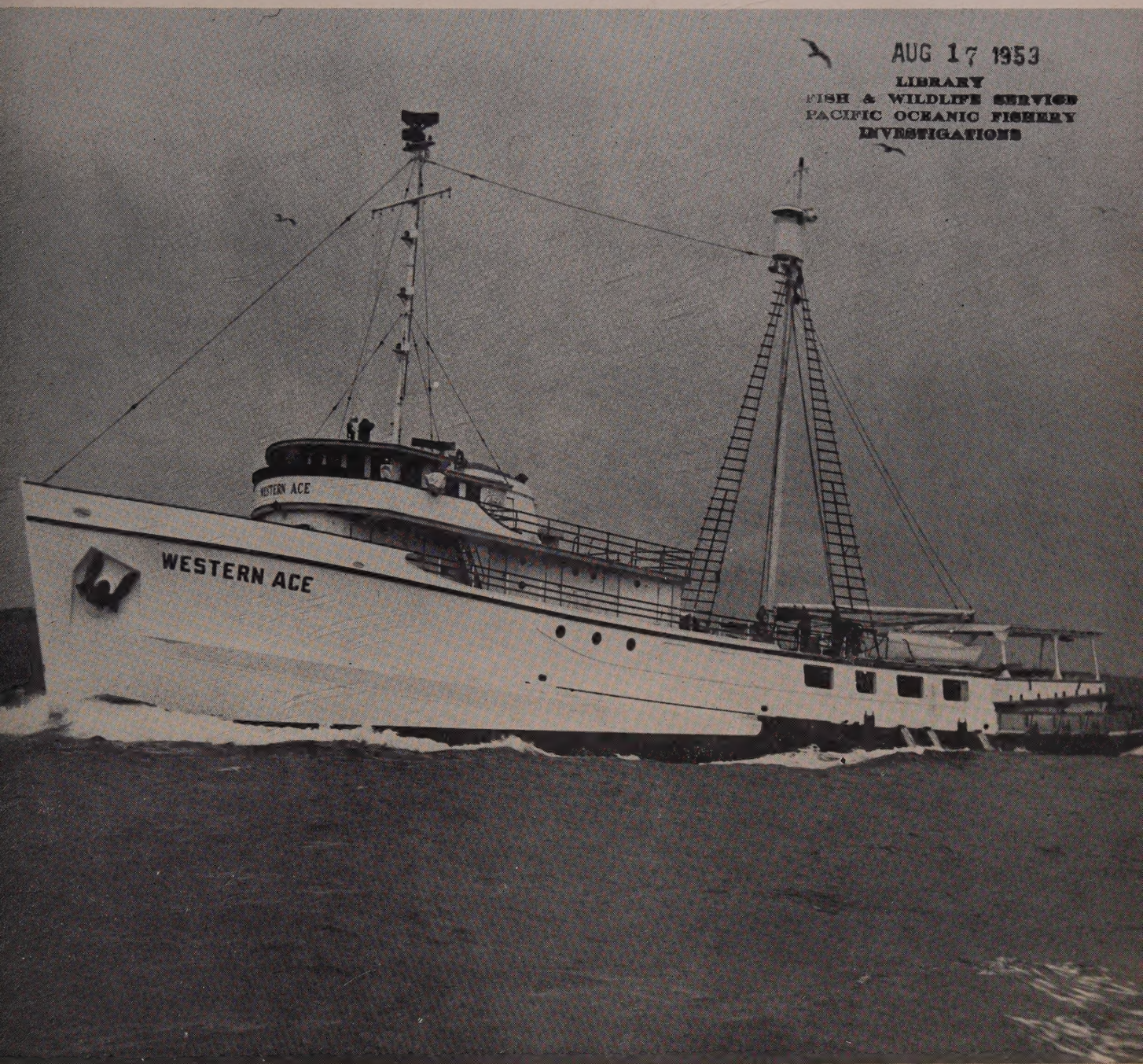


THE WESTERN ACE GOES FOR TUNA

REPORT FROM WASHINGTON • WHEN CATCHES GO DOWN

PUERTO RICO'S FISHING INDUSTRY

"...it's the BEST for boats of the Tuna Fishing Fleet."

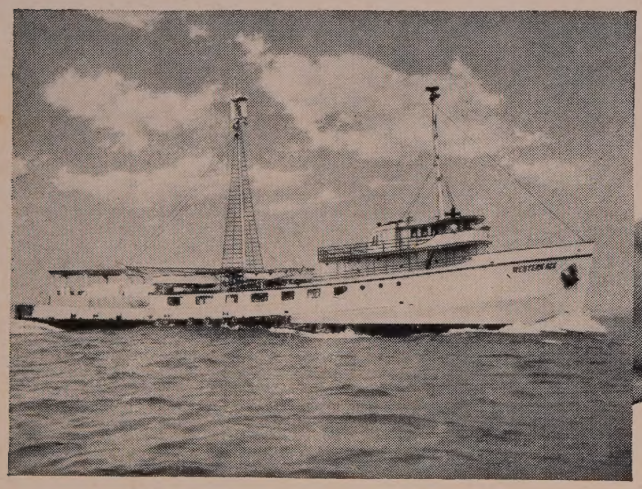
SAYS RALPH M CABE, CAPTAIN, THE WESTERN ACE

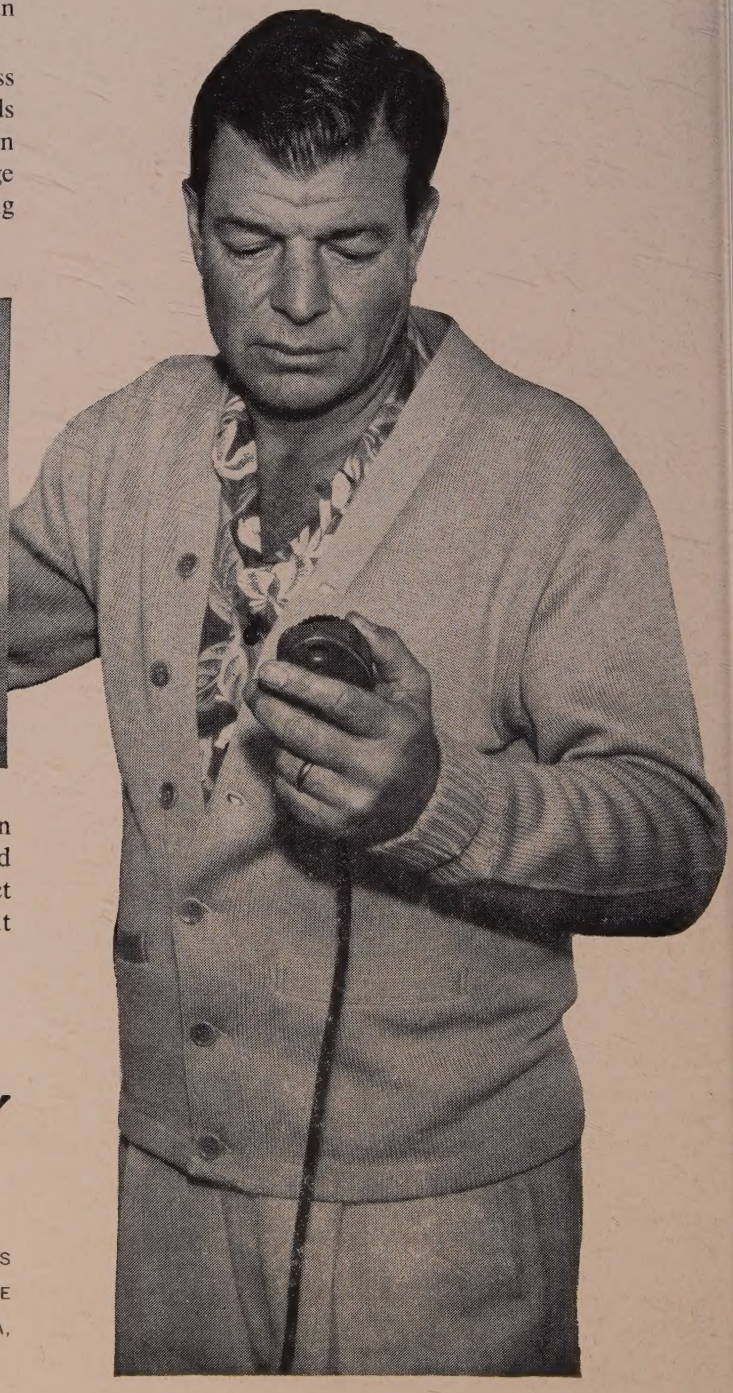
Like every captain and owner concerned with cutting operating costs to the bone, Captain McCabe is thoroughly "sold" on the Sperry Magnetic Compass Pilot. "From my many years of experience on both naval and commercial vessels, I sincerely believe the Magnetic Compass Pilot to be the BEST for boats in the Tuna Fishing Fleet. The Western Ace is the second fishing boat on which I have had the pleasure of having this dependable automatic steering equipment. I certainly recommend this pilot to all boats of this type."

Strong praise? Certainly, but this is what prompts it:

■ When the Western Ace heads for the fishing grounds, no miles are wasted in getting there. The Magnetic Compass Pilot holds a true course *automatically* — through the roughest weather and more accurately than a human helmsman. Both time and fuel are saved.

■ And *at* the fishing grounds, the Magnetic Compass Pilot provides additional saving—by freeing more hands for fishing. With the portable remote controller Captain McCabe can set or change course swiftly from vantage points outside the wheelhouse while directing fishing operations.





■ If you'd like to know more about the savings you can expect from a Sperry Magnetic Compass Pilot aboard your fishing vessel, drop a line to our nearest District Office. You'll receive detailed information without obligation.

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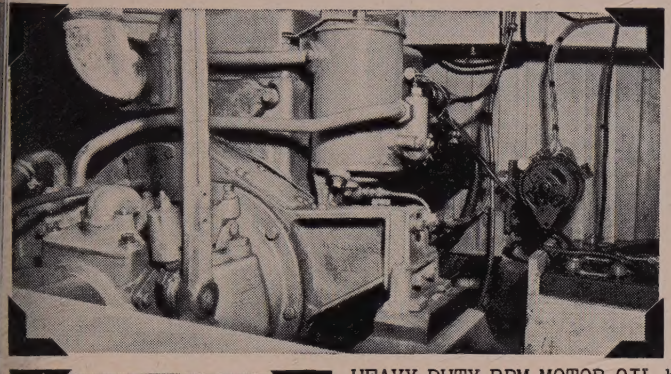
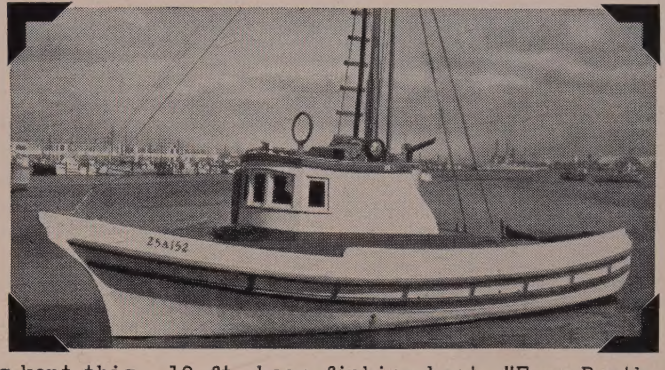
STANDARD ENGINEER'S REPORT

DATA

LUBRICANT	Heavy Duty RPM Motor Oil
UNIT	115 H.P. marine engine
SERVICE	Fishing boat "Four Brothers"
CONDITIONS	Low engine temperatures—constant load
FIRM	V. Passanisi & Son San Diego, Calif.

Engine clean after 1⅓ years of "cold" operation!

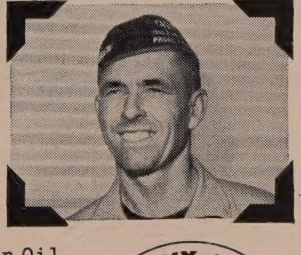




HEAVY DUTY RPM MOTOR OIL has kept this 115 H.P. marine engine clean and running perfectly for 16 months, despite tough work 10 hours a day, 5 days a week. The engine powers the 32 foot, 10 ft. beam fishing boat, "Four Brothers," operated by V. Passanisi and his son, Frank. When inspected recently, engine showed no deposits, all rings and bearings were in good condition.

FRANK PASSANISI says, "Carbon is a common problem in most fishing boat engines because they work 'cold' —at temperatures too low for best operation. However, Heavy Duty 'RPM' solved that problem for us. The way our engine runs now, we should be able to go 5 years before thinking of an overhaul."

MECHANIC E. B. DAVIS, owner of Rosecrans Garage, San Diego, says, "When I opened this engine to grind the valves, it was the cleanest I'd ever seen in this type. There were no signs of wear in cylinders or on pistons."

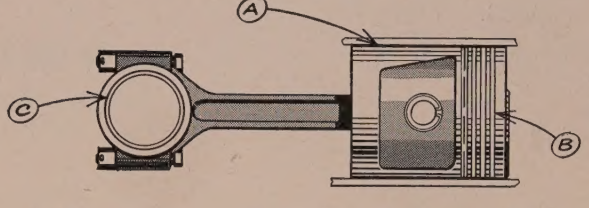


REMARKS: Heavy Duty RPM Motor Oil was developed through atomic research to prevent extra wear. It keeps engines clean of carbon and lacquer, resists the formation of deposits, prevents corrosion, and stops foaming in the oil systems. Comes in several grades.

HEAVY DUTY RPM MOTOR OIL

TRADEMARK "RPM" REG. U.S. PAT. OFF.

How Heavy Duty RPM Motor Oil doubles engine life



A. Contains special compounds that keep lubricant on metal whether hot or cold —reduce starting and running wear and rusting when idle.

B. Detergent makes carbon and soot contaminants harmless—keeps rings free, engine clean.

C. Resists oxidation and corrosion, stops foaming.

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STANDARD OIL COMPANY OF CALIFORNIA

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AS IN THE PAST SO IN THE FUTURE

All Activities of the American Tunaboat Association

Are Directed to Improvement and Prosperity

OF THE TUNA INDUSTRY

Edward Madruga, PRESIDENT

Harold F. Cary, MANAGER

American Tunaboat Association

No. 1 Tuna Lane • San Diego, California

PAN AMERICAN Fisherman

"BUSINESS MAGAZINE OF THE WEST COAST FISHERIES"

BRIANT SANDO—Editor and Publisher
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Busco-Nestor Studios

VOL. VII — No. 9
APRIL
1953

DOMESTIC BUREAUS
Portland, Oregon; Seattle, Washington; Coos Bay, Oregon; San Francisco, Los Angeles, San Jedro, San Diego, Monterey, California; Aberdeen, Washington; New York City; Washington, D. C.; Boston, Mass.

FOREIGN BUREAUS
Honolulu, T. H.; Anchorage, Alaska; Sydney, Australia; Mexico City; Lima, Peru; Balboa, Canal Zone; Capetown, South Africa; Tokyo; Ensenada, Mexico; Tijuana, Mexico.

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About This Issue . . .

Present status of fishery legislation between the United States and Japan is covered in the Editorial at top of page 6.

*

Every industry has its leaders who go right ahead regardless of the ups and downs of production and prices. That's the story of the Petrich family and the Western Ace, page 11.

*

While commercial fishing is not a major industry in Puerto Rico, some interesting points regarding that country's operations are brought out by writer Albert S. Keshen on page 12.

*

Report from Washington is another in the regular monthly features contributed from the Nation's Capital by John Harms, starting on page 9.

*

What to expect in the future "When Catches Go Down" is covered on page 14 by the Honorable Thor C. Tollefson, Representative from the state of Washington and Chairman of the Fisheries Sub-committee of the House Committee on Merchant Marine and Fisheries.

Sando Publications: PAN AMERICAN FISHERMAN • FRUIT & VEGETABLE REVIEW

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EDITORIAL

It is expected the new treaty of friendship, commerce, and navigation between the United States and Japan, signed early this month quietly, may have a direct effect upon the fate of the much harassed Southern California fishing industry.

Copies of the new treaty have not yet been made available, but spokesmen for the San Pedro-San Diego tuna fishing and canning industry said they were caught flat-footed by the obvious secrecy attending negotiations.

Both the United States Senate and the Japanese Diet must yet ratify the new treaty, and according to the U. S. State Department submission for approval will be made to the Senate immediately. New Japanese elections April 19 may postpone approval by the Diet over there.

Careful study by heads of the industry will be made to see just what effect the new treaty may have on general thinking regarding higher tariffs on Japanese imported tuna to this country. If it is found that "friendshhip, commerce, and navigation" in the new treaty have a bearing on the subject, steps will be taken to block Senate approval, industry spokesmen indicated.

While the new treaty is not a trade agreement, it is generally viewed within the industry as another strategic move on the part of the State Department to throw a monkey-wrench into the machinery of the extension of the Reciprocal Trade Agreements Act, slated for hearings on April 22 by the House Ways and Means Committee.

State Department and Administration leaders are expected to insist upon the one-year extension of the present Act (which expires in June, 1953) and advocate the bill proposed by Congressman Richard M. Simpson (R., Pa.) whose act would renew the extension for one year but would bar any lowering of tariffs to levels that "imperil" American producers or workers.

A rather vague description of the new treaty has been secured from the State Department, and generally speaking each government:

1—Agrees to accord, within its territories, to citizens and corporations of the other, treatment no less favorable than it accords to its own citizens and corporations with respect to the normal run of commercial and industrial pursuits;

2—Affirms its adherence to the principles of nondiscriminatory treatment of trade and shipping;

3—Formally endorses standards regarding the protection of persons, their property and interests that reflect the most enlightened constitutional principles; and

4—Recognizes the need for special attention to the problems of stimulating the flow of private capital investment.

It is plain to see that this wording is couched in such general language that its specific application to our industry will have to be clarified later.

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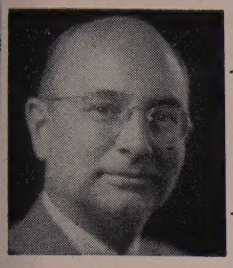
Pack of California Sardines (Pilchards) 1942 to 1952

The 1952 pack of California sardines (pilchards) amounted to 106,746 standard cases, valued at $918,072. Compared with the previous year, this was a decrease of 96 per cent in volume, and 95 per cent in value.

Year	Cases	Value
1942	3,744,624	$15,509,964
1943	3,354,697	14,352,359
1944	3,650,919	15,225,919
1945	3,765,981	15,346,472
1946	2,997,170	19,895,649
1947	1,652,592	16,538,375
1948	2,654,149	21,892,893
1949	3,768,212	21,334,825
1950	5,070,805	26,345,609
1951	2,864,984	19,362,744
1952	106,746	918,072

Source:—Fish and Wildlife Service, Department of the Interior.



The Publisher's Page . . .

Market Conditions

Plentiful supplies of fishery products will be available to dealers and consumers during April, says a report from the Fish and Wildlife Service. A number of factors will contribute to this situation:

Spring runs or migrations of a number of species, such as shad, smelt, salmon, and mackerel will be under way. The seasonal increase in fishery activity, with milder weather and the advance of the season generally, will result in larger catches. Lent ended early in themonth, doubtless will bring some decrease in consumer interest in fishery products.

A major factor in the supply situation is the unusually large stock of fishery products in cold storage. A considerable part of this supply is ordinarily moved out of the warehouses before the first of May, when new stocks of frozen fish begin to build up.

Trench Found In Ocean Floor

A trench five times as deep as the Grand Canyon has been discovered in the ocean floor of the South Pacific, according to the Scripps Institution of Oceanography, La Jolla, Calif.

The discovery was reported by a group of the institution's scientists who recently returned from a 40,000-mile expedition into the South Pacific.

Dr. Roger Revelle, director of Scripps and head of the expedition called "Capricorn," said they charted a sea mountain rising from the bottom of the undersea canyon. "The mountain rises 25,000 feet and comes to within 1,200 feet of the surface of the ocean."

Revelle said another interesting discovery on the voyage was the huge amounts of heat given off by the ocean bottom. Readings showed the bottom of the seas gives off as much heat as there is on land.

The ocean explorer said sediment on the sea bottom averages only 600 feet, contrary to a belief much more had accumulated on the ocean floor. He said temperatures at the bottom of the sea may account for the "very thin" layer of sediment.

Japanese-Australian Treaty Talks

Talks for a Japanese-Australian Fisheries Treaty were recently proposed for "sometime in April in Australia" by the Australian Government.

Under Article 9 of the San Francisco Peace Treaty, Japan agreed to "enter promptly into negotiations with Allied Powers so desiring for the conclusion of Bilateral and multilateral agreements providing for the regulation or limitation of fishing and the conservation and development of fisheries on the high seas."

There are two reasons why Japan has delayed such action, according to a report from the U. S. Embassy at Tokyo:

1. Japan would like to hold the negotiations in Tokyo, because it is more economical, and because with its fisheries experts close at home they could better handle the problems that constantly arise.

2. Reopening of long-deadlocked Japan-Korean treaty talks should have priority over the recent Australian proposal.

Foreign Fish

It's all right to kick against imports of Japanese tuna (about 32 million pounds in 1950 and showing considerable increase since then) but "there are others," according to the following news item in the Wall Street Journal:

Foreign fish bolster seafood plenty. Canada sent us 103 million pounds last year through November, against 82 million a year before. In the same time the flow from Norway and Iceland swelled from 26 million pounds to 46 million. At the start of the year, U. S. storage stocks of fish totaled 196 million pounds, 16% over a year earlier.

Tuna Grounds In Coral Sea

Experimental fishing by a Japanese whale-catcher boat en route to the antarctic has revealed indications of good catches of tuna in the Coral Sea between Australia and New Caledonia, according to a Japanese press report.

This vessel, "Fumi Maru No. 15," did some experimental fishing with long lines in waters south of the equator. Good tuna fishing was indicated at 19° 43′ S. latitude and 156° 32′ E. longitude. The catch of the brief experimental fishing consisted of 11 yellowfin tuna, 8 albacore, 1 broadbill swordfish, and 15 Spanish mackerel. This is equivalent to a Japanese tuna boat catch of 350 baskets of gear on regular long-line operations, or 256,000 pounds per haul.

Tuna fishermen at Misaki, one of the leading tuna ports in Japan 3,480 miles from the new tuna area, believe this distant fishing ground can be fished by the large-sized tuna boats which have been completed or are under construction (350 gross ton class). Indications are that Japanese boats will soon make trips to try out this newly-reported tuna area for full-scale commercial operations.

New Bottom-Fishing Area Off California

A new bottom-fishing area was discovered recently off the California coast by a research team of commercial fishermen and the California Department of Fish and Game. The new grounds (about 600 square miles 140 to 350 fathoms deep) lie 25 to 30 miles off the coast from Morro Bay and Avila. The potential of this bottom fishery is estimated at $3 million annually.

Two vessels, The "Alamo" and "Empire II," were used in the three-day survey which produced the find. A state biologist reported, "Mature and heavy dover soles were found in quantity and plenty of rockfish were taken, indicating that summer trawling might be as rewarding as that off Eureka."

Canned Tuna and Tuna-like Fishes, 1952

The pack of canned tuna and tunalike fishes in 1952 totaled 9,155,202 standard cases, valued at $113,000,833 to the packers.

California accounted for 7,969,866 cases, or 87% of the total. Oregon followed with 627,329 cases, Washington and Hawaii 313,495 cases. The States of Maine, Massachusetts, Maryland and South Carolina accounted for the remaining 204,512 cases, with a total value of $2,355,903 in addition to those listed below.

Species	California		Washington, Oregon and Hawaii	
	Standard cases	Value	Standard cases	Value
Tuna:				
Albacore	1,847,669	$24,032,879	740,657	$10,097,021
Yellowfin	4,012,454	48,501,103	4,424	39,092
Bluefin	94,898	1,179,701	.....	.....
Skipjack	1,641,278	20,379,405	.....	.....
Tonno	146,567	1,990,523	.....	.....
Miscellaneous	.....	.....	195,743	2,487,071
Total	7,742,866	96,083,611	940,824	12,623,184
Tunalike fishes				
Bonito	47,213	415,165	.....	.....
Yellowtail	179,787	1,522,969	.....	.....
Total	227,000	1,938,134	.....	.....
GRAND TOTAL	7,969,866	98,021,745	940,824	12,623,184

Note—"Standard cases" represent the various sized cases converted to the equivalent of forty-eight No. ½ tuna cans to the case, each can containing 7 ounces net weight of solid meat or 6½ ounces net weight of chunks, or 6 ounces net weight of flakes or grated. Dietetic and baby food tuna packs are included in these totals.

Pack of Canned Tuna and Tunalike Fishes, 1941 to 1952

Year	Standard cases	Value
1941	2,931,581	$19,397,887
1942	2,484,749	30,742,493
1943	2,696,073	31,430,189
1944	3,560,020	40,836,117
1945	4,531,565	47,407,451
1946	4,784,484	59,135,823
1947	5,894,495	90,609,175
1948	7,037,758	112,612,296
1949	7,290,320	97,710,325
1950	9,016,541	112,830,094
1951	8,236,725	99,046,206
1952	9,115,202	113,000,833

Note—Data for years prior to 1952 do not include pack in Hawaii. Source—Fish and Wildlife Service, Department of Interior.

Swedish Companies:

A trade list of Swedish commercial fishing companies and fish exporters has been issued by the commercial intelligence branch of the office of international trade. Copies of *Commercial Fishing Companies and Fish Exporters—Sweden* may be purchased at 1.00 each by firms in the United States from the Office of International Trade, U. S. Department of Commerce, Washington 25.

STEEL CLIPPERS by

AVONDALE

Famous in the Fleet

Steel tuna clippers built by Avondale have made a great name for themselves—through sturdiness, seaworthiness, and downright dependability!

Avondale has learned the art of building steel tuna clippers to the complete satisfaction of owners, shippers and crews. Consult Avondale before you build.

AVONDALE MARINE WAYS, INC.

AVONDALE, LA.

Report from Washington

Gleaned from the Nation's Capital by John Harms

TUNA TARIFF STATUS.--No date for a hearing on H.R. 93 to impose a 5 cents-per-pound duty on imported fresh or frozen tuna has yet been set. And not so much as a closed committee discussion has been held on the bill introduced January 3 by Rep. Hubert B. Scudder (R) Calif. Here's a point-by-point run-down on the bill at press time:

--o--

THE HOUSE SIDE.--Sources, usually well-informed, say that for the time being the bill is bottled up because:

1. Too much disagreement last year between West Coast and East Coast canning interests which some members of the House Ways & Means Committee regard as having common interests;

2. The bill is not on present Committee agenda, and prospects are that it won't make the grade on a new agenda immediately following Easter recess;

3. Some House members are waiting to learn what the Tariff Commission report on the tuna industry has to say in its special report to the Senate Finance Committee. The Commission may ask for another time extension to prepare the report . . . in addition to the 20-day extension it already had, from March 1.

4. Despite easy passage of the tuna bill in the House last year, the Ways and Means Committee also awaits some word from high Administration policy levels on the question of "free trade."

--o--

THE SENATE SIDE.--The Finance Committee has set no date for discussion or study of the tuna industry report when it does get the Tariff Commission report. However, while the committee will study the report, it very probably will wait until it sees the fate of the tuna tariff bill in the House before it takes much action.

What the Senate Finance Committee finally decides on tariffs for tuna can well be expected to decide final chances for such legislation . . . unless more powerful backing by individual members of the Senate committee is swung behind tuna.

At the same time, it is at this point that the importance of the Tariff Commission report to the Senate can be vastly over-rated. The Tariff Commission report is expected to furnish only data that will enable the committee to see the effect on the domestic tuna industry of continuing imports of tuna without imposing a duty. The report will not recommend to what extent, or whether, the tuna interests should be protected.

AGAINST TUNA DUTIES.--Working against an import duty for tuna is a national, well-organized publicity drive to promote a definite view on foreign trade . . . "trade, not aid" is its slogan. Although unintentional, this is a poor background against which to fight for tariffs for tuna.

But there still is a basis for hope. The whole question of "trade, not aid" vs. tariff protectionism is in a worse snarl than it was a month ago. As the fight gets hotter, "free traders" likely will be shown as favoring free trade only for the purpose of increasing their own exports.

Observers here say, in other words, that tuna men will have to get in the fight to see that tuna tariffs are not traded off in order to keep out luxury trade items such as cheese, or maybe just can openers.

--o--

FREE TRADE GETS BOOST.--The Public Advisory Board for Mutual Security, a group of 12 public, business and agricultural and labor representatives, has called for sweeping changes in U.S. foreign trade laws . . . giving more push to the "trade, not aid," free-trader drive. This report parallels closely another recent report made by the Committee for Economic Development.

The Mutual Security Board's recommendation which is loaded with meaning for the tuna industry goes like this:

". . . Decisions on trade policy (should) be based on national interest, rather than the interest of particular industries or groups; that in cases where choice must be made between injury to the national interest and hardship to an industry, the industry be helped to make adjustments by means other than excluding imports--such as through extension of unemployment insurance, assistance in retaining workers, diversification of production and conversion to other lines."

The Mutual Security Board was appointed by former President Truman, but observers here believe that it makes strong argument along lines sought by some powerful men in the new Administration. This drive for freer trade and "trade, not aid" is really just getting off the ground. Look for more such reports and great steam-roller efforts to put these ideas into the laws of the land.

--o--

WEAKER FISH DEMAND?--Yes, says the government's Bureau of Agricultural Economics. This agency, which keeps a wary eye on all segments of the food industry, as well as agriculture, predicts generally a "somewhat weaker civilian demand" for fishery products in 1953 than last year.

Much of this weaker demand foreseen by the BAE likely is to come from greater demand for beef and poultry products. Beef production especially is tremendous, and prices are lower and likely will continue that way for quite a while. Per capita consumption of fresh and processed fish and shell-fish may be about as large as in 1952 (the population continues to increase, thus keeping per capita use higher), but the agency says retail prices this year may not average quite as high as a year ago.

(Continued on page 23)

The WESTERN ACE Goes for Tuna

Two members of the family and of the Company which converted the vessel stand on the bridge with two of the crew. Left to right: Martin Petrich of the Western Boat Building Co.; Capt. Ralph McCabe; Tony Boulart; and Hervey Petrich of Western Boat.

By ROBERT K. LAWSON

THE highly controversial status of the West Coast tuna fishing industry received what most observers would call a "shot in the arm" when the Western Boat Building Company, of Tacoma, Washington, outfitted the biggest tuna clipper afloat and recently sent the Western Ace to join the Southern California fishing fleet.

Harassed since the end of the war by tariffs, quotas, high imports, and territorial waters jurisdiction, the tuna fleet had fallen far below normal catches from a total production standpoint.

The high cost of maintaining these big tuna clippers while standing idly in port (because there was no guaranteed price for tuna and therefore a weak market for American-caught tuna against the price structure of foreign imports) rapidly ate up whatever small profits had been accumulated.

The situation then backed up into the shipbuilding and repair yards, and resulted in very few clippers coming down the ways during this strenuous period.

A possible solution for some of these problems was voiced by Hervey Petrich, fleet manager for the Western Boat Building Company. Petrich's theory was that during such slack times, when American-caught tuna could not compete on a dockside price status with foreign imported tuna, the tuna clipper operators could take their vessels north and reap a good harvest from the salmon banks.

Proving the practicality of his convictions, Petrich took the Western Ace to the salmon grounds as a mothership and returned to the American Packing Company, of Anacortes, Washington, with 137,000 top grade salmon for a top price.

A completely privately-owned enterprise, the fleet operators have had to depend entirely upon their individual resources for investment capital and operating expenses. One of the few big businesses not subsidized partially or wholly by the government, this is suspected to be one of the reasons for the State Department's long-time inertia where either commensurate tariffs, or quotas, could be effected for the protection of this home industry.

The Sperry Mark XIV Mod. 1 gyro compass on the Western Ace transmits from master unit to a steering repeater on the bridge.

Built over a period of 50 years, the Southern California fishing fleet now includes over 3,300 fishing vessels and represents an investment of some $105,000,000, including the equipment necessary to operate. This figure was quoted recently as the replacement figure by Harold Cary, general manager of the American Tunaboat Association, of San Diego, representing about 600 tuna clipper owners.

Indubitably, it took courage and foresight for the Western Boat Building Company to put in operation a $500,000 vessel, such as the Western Ace, in the present status of the tuna industry . . . and the "Ace in the hole" in this operation appears to be the salmon operation up north.

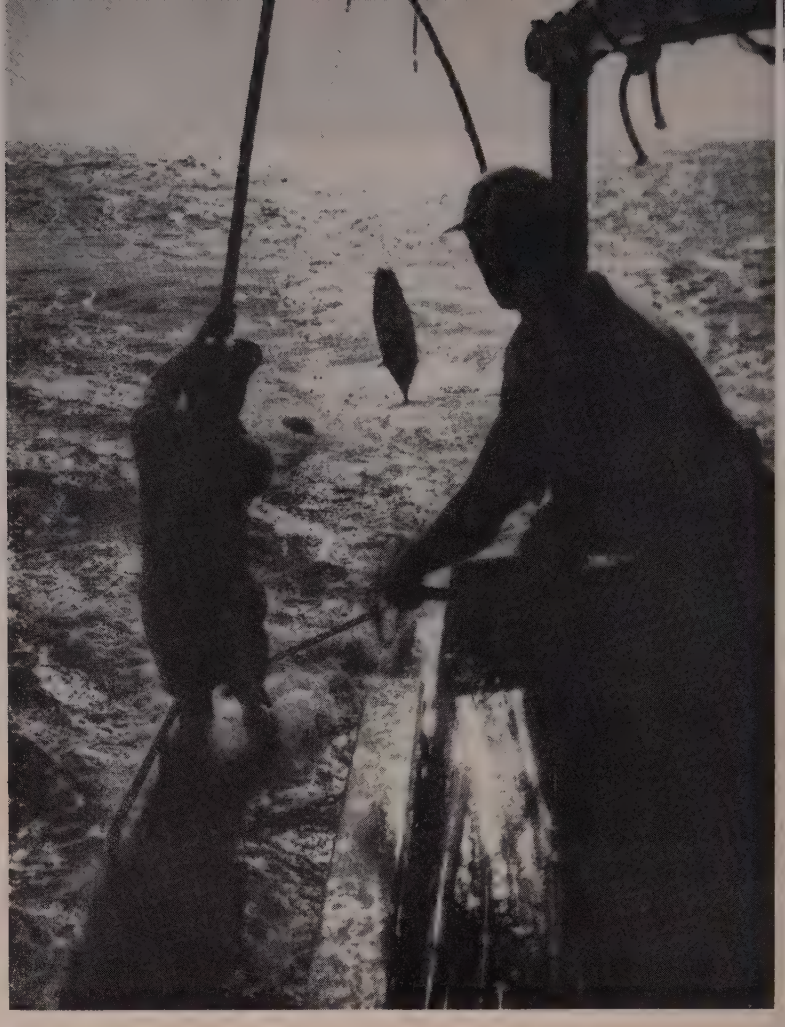
The Western Ace characterizes much of the operation of the Western Boat Building Company, who pioneered the big tuna clippers with the launching of the first 125 foot bait boat, the Northwestern, in 1922. This vessel is still in operation and fishes for the Van Camp Sea Food Company, as does the Western Ace.

Following the Northwestern came the Western Explorer, another clipper which took another first when she moved to the East coast to catch

(Continued on page 16)

Puerto Rico's FISHING INDUSTRY

By ALBERT S. KESHEN



ALTHOUGH a minor industry in Puerto Rico, commercial fishing is considered important to the economy of the country since it provides work directly or indirectly for about 2,500 persons including the fishermen, middlemen and retailers. Of 2,137 fishermen, 875 or 41% are either boat or gear owners and the remaining 1,262 or 59% assist the former in fishing operations.

Puerto Rico's commercial fishing industry is limited as the surrounding coastal waters are not productive, being too deep for banks. Greatest depths are found off the north coast, hence most fishermen operate from one to three miles off the western shore.

All catches, except shrimp, are for local consumption. The hauls make a welcome addition to the islanders' larder since most food products have to be imported. This may sound like a paradox since the Commonwealth is predominantly agricultural, but the leading crops are sugar and tobacco which are raised mainly for export. The importance Puerto Ricans place on a fish diet is indicated by their imports on salt cod, which alone last year came to about 35 million pounds.

An analysis made by the Division of Fisheries and Wildlife of the Insular Department of Agriculture and Commerce reveals that last year the 875 fishermen devoted 6,265 months to fishing which represents an average of 7.1 month per fisherman. The average catch is 748 pounds (lobster included) per fishing month and 5,310 pounds per year. Gross income of the fisherman averages $900 annually.

Fishing Craft

During the months from January to May, most fishermen prefer to work in the sugar cane industry or in public works where they can get more remunerative jobs. As a matter of fact, during those months fish are less abundant and fishing operations are hampered by rough seas.

Puerto Rico's fishing fleet is comprised almost entirely of row and sail boats. These amount (by last count) to 798, of which 495 (63%) are classified as row boats, 270 (33%) sail boats and 33 (4%) motor boats. Row boats have declined in number indicating that the dory and hand line as a fishing unit do not produce enough to make a living. On the other hand, the number of motor boats increased from 14 to 33, revealing that the fishermen realize that in order to increase their catch, fishing operations have to be extended farther to more productive banks like Mona, Desecheo, Vieques, Culebras and the Virgin Islands.

The total capital investment in fishing boats of all types in operation in the Puerto Rican fisheries is estimated at $198,100 by latest count. Row boats averaged $56; sail boats, $380; and motor boats, $1,800.

There are no conventional shipyards. Boats used in Puerto Rico are of wooden construction and all locally built. Sail, motor, and most of the row boats are well built and are suitably adapted for the particular type of fishing in which they are engaged. Local natural bent woods

are used for stems, ribs and sterns. Wood for planking is imported.

Practically all boats are painted and well kept. Motor and larger sail boats have the bottom sheathed once or twice a year, depending on the economic condition of the owners. Light boats are hauled out almost every day and their bottoms are always clean. Sail and motor reported as decked, but having no accommodations, number 109. Sail and motor boats remaining out for some days carry ice chests on board for the preservation of the catch. Each boat has facilities for keeping from 600 to 1,000 pounds of fish.

Types of Gear Used

Fishing is done by hand line, trolling, beach seine, gill net, pot (nasa), cast net and weir. Investment in fishing apparatus comes to $81,552 (by latest count). An average of 57.4 pounds of fish was caught last year for every dollar invested in gear.

Of this total investment, 36% is in haul or beach seines; 27.6% in gill and balahoo nets; 24.6% in nases; 5.5% in hand, trawl and troll lines; 1.4% in weirs; and 4.6% in cast nets. Although 63.6% of the total investment in gear correspond to gill nets and seines, only 21% of the catch, or 887,350 pounds was reported by the fishermen as caught with such apparatus. Pots yielded 1,436,280 pounds or 34%; lines contributed 1,829,745 pounds or 43%. Fish caught in weirs was estimated at 71,626 pounds, or 1.7% of the annual harvest.

Beach haul seines, or "chinchorros de arrastre," as they are locally called, vary in length from 50 to 280 fathoms and in depth from 2 to 3.5 fathoms. The center of the seine is usually deeper and the meshes smaller than in the wings. In general, the meshes in the webbing range from 1 to 4½ inches mesh stretched. The net is dropped in half-circle around a school of fish and is then hauled toward the beach by pulling the ropes on each wing. Hauling is done by hand, and this operation requires 6 to 8 men, depending on the length of the seine. In 1951 there were used 113 beach seines with a total of 25,990 lineal yards.

Gill nets, "filetes or trasmayos de ahorca" are widely used, their number estimated at 205 with a total of 30,340 lineal yards. These nets range in length from 18 to 300 fathoms and in depth from 3 to 4 fathoms, the mesh from 3 to 4 inches, stretched measure. In the southern zone, the thread net or balahoo net is prevalent over the typical trasmayo. Halfbeaks are watched for swimming in schools in the surface and are readily encircled. When flushed, the balahoo strikes the net and becomes gilled. The balahoo net is also used as a drift net.

All netting used in the fisheries is hand-knit by the fishermen and their families and compares favorably with that made by machines in other countries. Cotton, twine, sheetlead for weights, rope and cordage are imported; only net floats are made from material locally produced. Yagrumo, a native species of light wood, is used for floats.

The "tarraya" or cast net is the only gear used extensively in Puerto Rico to catch bait and to take fish for personal use. There are about 447 cast nets in operation, valued at $3,799 to the fishermen. Cast nets used for catching pilchards and thread herrings have ½ inch mesh; while those used for catching mullets have 1-inch mesh.

Three Kinds of Lines

Three types of lines are used: hand, troll, and trawl. Hand lines are the most productive of the three and most widely used. There are in operation 902 lines with a total of 4,478 hooks. This type is particularly employed in the red snapper and grouper fisheries. Sail boats carry from 3 to 5 hand lines, and these are fished in water from 50 to 200 fathoms deep. Hand lines are of heavy twine, with 3-5 hooks at the end and a sinker of lead weighing from 2 to 5 pounds, placed 4 or 6 feet from the end. The snapper grounds are found by means of a sounding lead, the sudden deepening of the water indicating that the "berril" or gulch has been reached.

Troll lines or "silgas" are extentively used by sail boats on their way to and from fishing grounds, and number about 570. They are important for catching kingfish, painted mackerel, bonito and barracuda. The main line is of heavy seine twine. A wire leader is attached to the main line, with a metal spoon at the end of the leader. Besides spoons, small size fish are often used for bait. Sail boats carry an average of 2 troll lines.

A total of 169 trawl lines (palengres) with 14,365 hooks are in use. These lines are operated from row boats and are fished in relatively shallow water, 3 to 15 fathoms deep. Each trawl line has an average of 85 hooks, fastened to gangings two feet long which are attached to the ground line at intervals of 5 to 6 feet. The trawls are coiled in buckets or wooden boxes as they are baited, the baited hooks being placed at the side in such manner that they can be thrown out quickly without fouling. Two men are required to set a trawl, one throws the trawl while the other rows the boat. As the trawl is hauled aboard the boat, the fish are removed and the hooks rebaited. In this way fishing is done continuously without resetting the trawl.

(Continued on page 26)

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When Catches Go Down

By THOR C. TOLLEFSON

WHEN we talk about fisheries matters, we talk about a large industry and also one of our great natural resources. While the industry aspects are important and numerous, above all a constant supply of fish is necessary for the industry to operate and exist. If the fish supply disappears or decreases the industry is directly affected; no fish — no industry.

The fisheries resources are not inexhaustible. Witness the case of the California sardine. Two years ago the pack amounted to 5 million cases. Last year it fell to a meager 75 thousand cases. The fish supply just disappeared. Where — no one seems to know. A lot of jobs both on shore and offshore are affected. So were the profits of the canners. More important still is the disappearance of a food resource.

Perhaps the sardine will come back. We hope so. But we can't sit idly by to find out. Some investigation and research must be done. Was the disappearance the result of natural causes? Was it the result of overfishing? Can anything be done to restore the runs? We must find out. Many jobs and much food is at stake.

This is a condensation of an address by Rep. Tollefson from the state of Washington at the Fishery Products Conference of the National Canners Association meeting in Chicago.

The shad of the Chesapeake, which has been one of the greatest fishing waters of our nation, is a good illustration of the fact that fish runs may be depleted. In some areas of the Chesapeake, shad runs have been depleted as much as 70 per cent to 80 per cent, according to Maryland State Fisheries officials.

There is the problem of the Alaskan salmon fisheries. During the years 1930 to 1943 inclusive, the total catch ranged from 73 million to 129 million fish. The annual pack never ran below 5 million cases. In 1936, the peak year, the pack amounted to 8.4 million cases.

During the years 1944 to 1952 the catch ranged from 45 million to 78 million fish. The annual pack was always less than 5 million cases. In 1950, for instance, it amounted to 3.3 million cases.

What caused the reduction in the catch and in the resulting pack? There were undoubtedly a variety of factors. During the war years there was an intensified operation in the taking of fish. Our government was interested in increasing the supply of protein foods for ourselves and our allies. Salmon was an easy food to obtain, can and distribute. Perhaps we fished too intensely. During that same period the Fish and Wildlife Service lost some of its trained personnel, either to other agencies of government or to private industry. The Service could not police its regulations as well, or carry out its programs as effectively. After the war the number of fishing vessels increased. Perhaps the escapement for spawning purposes was not large enough.

Constant attention, study and research with respect to conservation of fisheries will pay dividends. Witness the halibut fishery of the North Pacific. The halibut fishery a number of years ago seemed to face practical extinction. It had become greatly depleted—depleted to a point where it was not, from a practical business standpoint, profitable to go fishing. Now, as the result of a program of research and regulation jointly engaged in by the U. S. and Canada,

the halibut fishery has been restored. The taking of halibut is once again a profitable operation, providing jobs and profits. The work of the International Fisheries Commission of the U. S. and Canadian governments has paid dividends in jobs, profits *and* food resources.

A similar experience has been had with the Sockeye salmon, which used to be a large fishery. This specie of salmon spawned in the upper reaches of the Fraser River in Canada. Rock slides and road construction work obstructed the river and the fish were unable to reach their spawning areas. Over a period of time the fish runs almost disappeared. An international arrangement was entered into by U. S. and Canada. Through the joint efforts of these countries, the Sockeye salmon is on its way back.

Fishing in Distant Waters

As a consequence of fishery depletion, our fishermen have had to go farther and farther away from our own shores to catch certain species of fish. For example, the tuna fisherman of the Pacific Coast states, and the shrimp fisherman in the Gulf. Fishermen of other nations also fish in distant waters, far beyond the three-mile limit. They compete with our own fishermen for the same fishery resource. This situation has given rise to problems which did not exist in bygone years.

Our government has also been compelled to negotiate on fishery problems with Mexico, Canada, Japan, Central and South American countries, and with others. In the Gulf of Mexico several of our shrimp boats have been seized by the Mexican government, necessitating diplomatic negotiations. Our State Department has had to negotiate with Mexico on other fishery problems as well.

One of the bases for international negotiations is the need for conserving fishery resources of the open seas. They could be depleted by overfishing and bad fishing practices just the same as those nearer our own shores. Regulation of the fisheries must be on an international level with all interested nations participating.

Another problem requiring study is the importation of great amounts of cheaply produced foreign fish. A few years ago, our Committee held some hearings on this subject and heard considerable testimony on the matter. Witnesses pointed out, for instance, that employment in certain New England fishery areas had dropped 50 per cent because of these imports. Other witnesses predicted that some shore operations of the fishing industry would be forced out of business or would be compelled to move their operations to Canada. More recent information indicates that their predictions were to a considerable degree accurate.

Now we are informed that the domestic inventory of groundfish fillets is the largest in our history because of imports of foreign fish fillets. Domestic producers are concerned about the marketing of their products. Representatives of the fishermen themselves inform us that their livelihood is threatened. They want and expect Congress to do something to protect their jobs. They suggest tariffs and quotas on imports. They ask that our Reciprocal Trade Agreements be more truly reciprocal, to preserve domestic industry.

Congress must give the problem consideration and study. Of course the consumer has an interest in the matter; he wants his food costs to be as low as possible. On the other side is the desire of fishermen for preservation of their jobs. Congress must balance one against the other and at the same time give thought to the possibility of relinquishing control of a valuable food resource to foreign countries — one that will become more and more important with passing years as our population increases.

Pros and Cons on Tariff

Same with respect to our tuna fishing industry. Increasing imports of foreign tuna are causing tremendous concern on the part of domestic industry. Last year a tariff on certain imports was sought. The House approved a bill providing for such a tariff. The Senate failed to act. The arguments pro and con were the same as those which had been advanced on earlier and similar occasions: Protection of American industry and the jobs on the one hand, and lower food prices and the importance of foreign trade on the other. Congress will have to resolve it. Here, too, Congress must give consideration to the possibility of relinquishing control of a food resource to foreign countries.

An interesting situation from the standpoint of cannery employees is developing. Some of these employees have been opposed to a tariff because imports of foreign frozen tuna have assured them of more steady employment at their particular canneries. Now the Japanese, for instance, who are large exporters of frozen tuna, are beginning to do more of the processing of the tuna fish before exporting it. It is entirely conceivable that they will eventually do more of it. In the final analysis, it is possible that the only processing remaining to be done in the United States will be to place the product in the can. Then a canning operation here might require only a half-dozen employees where it now employs 50 or 60.

These fishing problems are of some importance to our economy. They also are important when considered as food resource matters. ★

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A test call is made on the 100-watt Northern radio transmitter and receiver by Hervey Petrich, as Capt. McCabe (left) looks on.

This 1,650-h.p. Fairbanks-Morse of the American tuna fleet. She

The Western Ace Goes for Tuna

(Continued from page 11)

and deliver tuna to Eastern canners at Gloucester, Massachusetts, in 1938. The war ended this operation, and it was not until 1945 that Western Boat Building Company again launched into the commercial fishing field.

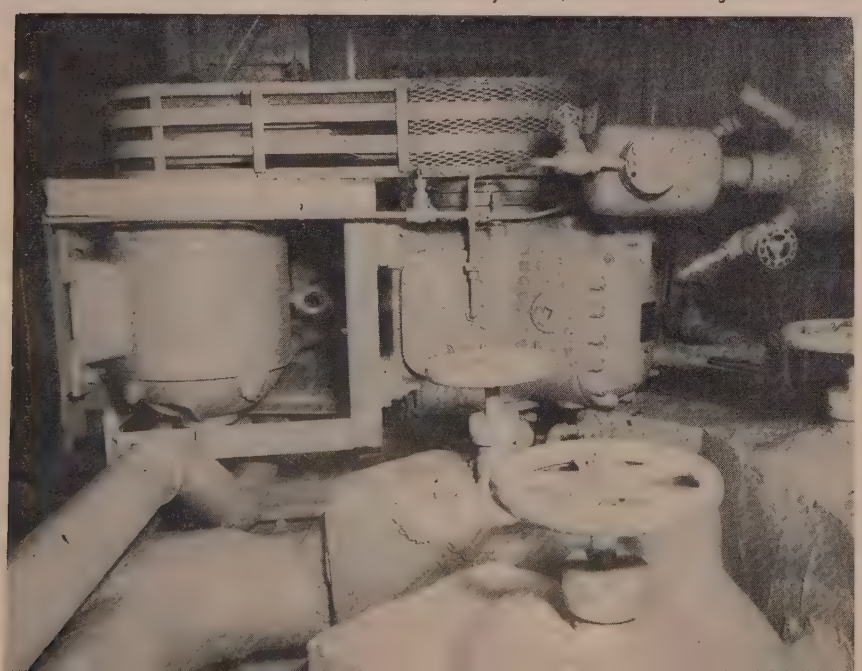
Building pleasure cruisers, Western Boat erected another yard and turned out the Fairliners. When a fire wiped out this operation the Company turned to the Fairliner tuna clipper tenders that are practically universal as bait hauling craft aboard the big clippers today.

A converted Navy ATR, the Western Ace is the largest tuna clipper afloat, standing 169 feet in length, with a 34 foot beam, and a 22 foot draft. Equipped with every modern navigational aid, she will range the Southern seas from San Diego to Ecuador and Peru in search of tuna for the Van Camp Sea Food Company, of San Diego and Terminal Island, California. Her fuel tanks carry a maximum of 90,000 gallons of fuel oil for her main engine, a Fairbanks Morse, Model 38U8$\frac{1}{8}$, opposed piston engine, and other auxiliary equipment also diesel fueled.

In addition to the fuel capacity, highest in the tuna fleet, she carries 2,800 gallons of lubricating oil. Both fuel oil and lubricating oil were supplied from the General Petroleum docks, in San Diego, before she left for Southern waters on February 22. With a crew of some 19 persons, the trip is expected to require three months, at a conservative estimate, to fill her 630-ton holds with tuna.

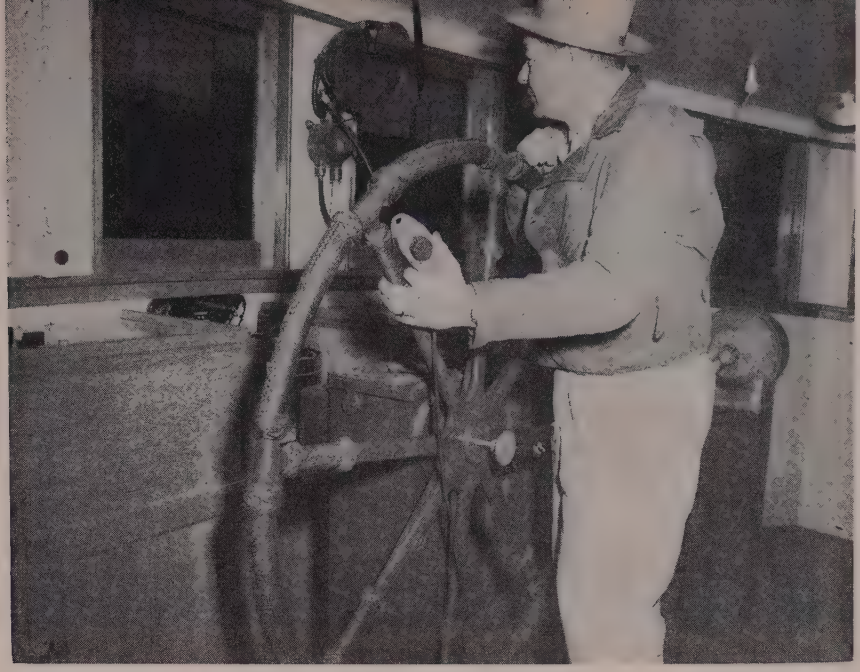
The Western Ace makes her maiden tuna fishing voyage under the capable direction of Captain Ralph McCabe, veteran skipper of the San Diego tuna clipper fleet. In

One of two York ammonia ice machines, each of 12 cylinders, handle the refrigeration needs.



Three big General Motors auxili

ce up among the speed leaders ins.



A Sperry electro-mechanical steering system and a remote control unit (in skipper McCabe's hand) allows the ship to be steered from any location within reach of the cord.

the fishing business since 1932, Ralph has skippered such vessels as the Rose Marie, Northern Light, La Playa, Sun Traveler, Sunset, and the Calistar. Prior to taking over the Sunset, Ralph was 25% owner of the Sun Traveler which he later sold out to new management.

Among other key personnel aboard are Lawrence VanBuren, chief engineer, with Reed Coffin as assistant engineer. Ralph is one of the few skippers in the fleet who does his own navigating. He will be assisted, however, by Carl Dibble, on this trip. Tony Goulart will be the chummer, or essentially deck-captain, or fish mate, as they are usually called in the tuna fleet. Harold Bowers "Sparks" will be the radio operator.

Under normal circumstances, such a ship as the Western Ace, would carry an airplane on her decks for scouting schools of tuna, and even more important for locating schools of bait fish with which the tuna are taken. The lack of an airplane this trip, it was reported by Hervey Petrich, was due to unavailability of a particular type specially designed for this purpose. Later, it was learned, the El Molitor Aircraft Service at San Diego, could have delivered a Piper Cub "135" complete with Edo Floats and other special equipment.

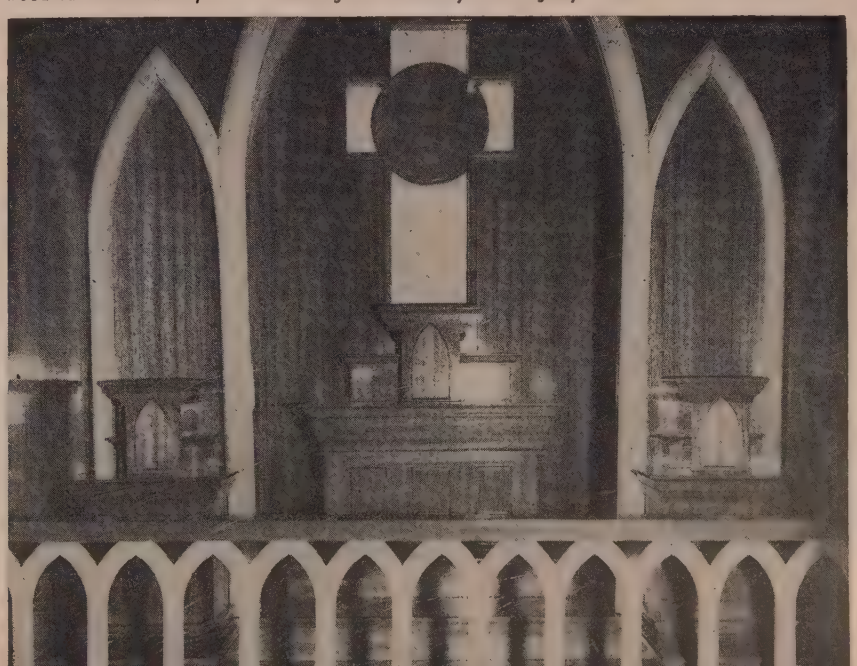
The Western Ace possesses some unique equipment, not heretofore installed aboard a tuna clipper. Ekolite Depth Sounding equipment installed both aboard the tuna clipper and in the speed boat, for locating bait is an entirely new innovation. Customarily, this equipment is aboard the clipper ship and is utilized for sounding the sea bottom and locating schools of tuna and bait from that point.

With the depth recorder aboard the tender, a chart records the depth of the ocean in addition to locating bait schools and charting their extent and density. The 2,500 fathom Ekolite Depth Recorder, sounding at the rate of nine soundings per minute is used aboard the Western Ace.

(Continued on page 28)

hown below, assure plenty of power.

While all tuna clippers have a chapel, this one is something special. A combination of hardwood lumber and exquisite furnishings lend beauty and dignity.



The GLOBE

An International News File Compiled from FOREIGN REPORTS

Mexico.—The ad-valorum tax on exports of fresh, cooked, or refrigerated lobster from Mexico has been reduced from 15 per cent to 3¾ per cent, retroactive to January 1 this year and expire December 30, 1953.

The reduction was made in view of the serious competition from North African and Australian lobster exporters, as well as increased costs of production and the low price prevailing in consuming centers.

Honduras.—The organization of a corporation primarily to catch and freeze shrimp off the Caribbean coast of Honduras is being planned by a group of Dallas and Fort Worth (Texas) businessmen, states a U. S. Embassy dispatch from Tegucigalpa where the group recently visited. The plan calls for a minimum capitalization of US $12,500 backed by cash and letters of credit at Tegucigalpa banks in the sum of US $100,000.

The group wants to explore the possibility of shrimp fishing on the North Coast for a period of one year, with a permit to increase the period to ten years should shrimping prove feasible. There are no commercial fishing companies in Honduras at the present time. One freezer vessel, now in Costa Rica and two shrimp boats from Corpus Christi, Texas, are scheduled for use in this venture.

Japan.—An application has been filed with the Japanese Government by three of Japan's largest fishing companies to operate a joint factoryship crab-fishing expedition in Bristol Bay in 1953 according to a report from the U. S. Embassy at Tokyo.

The fleet is expected to sail from Hakodate, Hokkaido in April; the 12 catcher boats will return there September 14, while the mothership Tokei Maru is scheduled to return to Yokohama on September 29.

New Newfoundland.—A new filleting and freezing plant at Fortune Bay, Newfoundland, expects construction to be completed and production should commence in July. This project is being financed by both Canadian and United State private capital, most of it U. S.

An annual output eventually of 10 million pounds of frozen fishery products is expected, and a full line is contemplated, including frozen shell-fish. The entire output of this Fortune Bay plant will be marketed frozen in the United States by a Georgia firm. A process called "flash freezing" will be used for freezing the fish.

A subsidiary plant to produce fish meal is also planned. This makes the third filleting plant to be established in Newfoundland since early in 1952.

Iceland.—Contracting markets for both frozen and salted fish, and stocks of processed fish, are taxing Iceland's limited storage facilities.

The most favorable market outlook at present is for stockfish (dried cod). This has been a significant export commodity only during the past two years, but will probably be of increasing importance in the future. Iceland's largest buyer of stockfish is at present the Federal Republic of Germany, which re-exports the fish to African customers.

Hawaii.—By a vote of 274 to 138 the House of Representatives passed H.R. 3575 to enable the people of Hawaii to form a constitution and State government and to be admitted into the Union on an equal footing with the original states.

Newfoundland.—Newfoundland exporters of frozen fillets to the United States report a marked slump in the demand for their products. Large stocks are accumulating in cold-storage plants in St. John's, according to a recent Newfoundland press release. Although stated to be in part seasonal, large shipments to the United States from Iceland and Norway, together with a decline in United States retail meat prices, have combined to shut off a good part of Newfoundland's regular fillet exports.

Newfoundland shippers of herring also are understood to be having a hard time in disposing of their stocks at prices that will pay costs or afford a small profit.

Canada.—There is currently before the Canadian Parliament "An Act to Protect the Coastal Fisheries," the purpose of which is to revise completely the present Customs and Fisheries Protection Act, which has been in effect since 1868 and was last revised in 1913.

The proposed changes are aimed (1) to provide more adequate definition of what is to be considered a fishing vessel, (2) to define in more detail the authority of Protection Officers, and (3) to extend the authority of the Government to license foreign fishing vessels to enter Canadian territorial waters.

Canadian territorial waters are defined in the new bill as "any waters designated by an Act of the Parliament of Canada or by the Governor in Council as the territorial waters of Canada, or any waters not so designated being within three marine miles of any of the coasts, bays, creeks or harbors of Canada and includes the inland waters of Canada."

Japan.—The Japanese mothership-type salmon-fishing expedition to the North Pacific for 1953 will include 3 motherships and 85 catcher boats (35 more than in 1952), reports a U. S. Embassy dispatch from Tokyo.

The 1952 expedition was operated jointly by the same three large fishing companies which will engage in the 1953 expedition. In 1953, each of the three fleets will be operated independently by each company. The 1952 operation was financially profitable, with much of the catch being consumed in Japan, especially as salted fish during the fall and winter months and in the New Year holiday season.

(Continued on page 19)

THE GLOBE

(Continued from page 18)

Norway.—A new fishery-type ASDIC, which registers herring schools at a distance of 1,000 meters (about 3,280 feet) was tested recently by personnel of the Norwegian Directorate of Fisheries on the commercial fishing vessel "Ramoan," reports the Fiskaren, a Norwegian fishery magazine.

Tests were made on the herring fishing grounds, and it is hoped this new ASDIC will prove practicable for the fishing fleet. The civil engineer who was on board the Ramoan during the tests said: "We are well pleased with the tests we made so far. We registered herring up to a distance of 1,000 meters and many times had good contacts."

In previous tests fishery research vessel, contact with herring schools has been made at distances up to 2,000 meters (6,560 feet), but at this distance an observer who has experience in herring detection is required.

★

Alaska.—Red salmon runs are poor in Alaska and the Fish and Wildlife Service has urged the industry around Bristol Bay "voluntarily to do everything possible to absorb the labor supply in adjoining districts where good runs are anticipated."

The service said "all indications point to good pink runs in southeastern Alaska," resulting in relaxation of seasonal restrictions.

Japan.—Japanese frozen swordfish exports to the United States in 1952 amounted to 9,910,731 pounds, valued at US$2,581,745, the Ministry of International Trade and Industry reports. This is approximately 2 million pounds and US$1.2 million less than in 1951, due to increased competition from Peruvian swordfish on the United States markets, states a U. S. Embassy dispatch from Tokyo. Japanese swordfish exporters expect an upward trend in trade with the United States in 1953 because of some evidence of increased consumer demand for this type of product.

★

Washington State.—Washington's seafood harvest in 1952 was one of the heaviest in 20 years. Several of the individual fisheries set records.

The total landings of 172,958,000 pounds, including 67,000,000 pounds of shellfish, compared with 181,168,000 pounds in 1951, when the Puget Sound commercial- fleet caught more than 33,000,000 pounds of pink salmon. This species occurs only in odd-numbered years on the sound and few were caught in 1952.

Of the major types of fish, salmon accounted for 46,716,000 pounds; halibut for 12,631,000; and bottom fish, including cod, sole, flounder and rock fish, for 39,607,000 pounds.

The shellfish included 60,522,000 pounds of oysters, equivalent to 917,000 gallons; 4,923,000 pounds of crabs and 1,654,000 pounds of clams.

The combined landings brought earnings of $18,712,000 to the fishermen.

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PROGRESS & PRODUCTION

CLEVELAND DIESEL EXPANDS

A new sales and service office at 870 Harrison Street, San Francisco, has been opened by the Cleveland Diesel Engine Division of General Motors. Added floor space will provide more facilities for the stocking of service parts.

According to Thomas E. Hughes, general manager of the Cleveland Diesel Engine Division of General Motors, "This expansion was necessary to render greater service to ship operators on the West Coast. We are looking forward to a considerable increase in the use of these engines in Washington, Oregon and California. We have established offices and representatives in Seattle, Portland, and San Diego, with West Coast headquarters at San Francisco."

Charles C. Cheevers will continue in charge of West Coast sales and service. He has represented Cleveland Diesel on the West Coast since 1942.

OIL FILTER

A new type of full-flow oil filter for marine engines is announced by Purolator Products, Inc., Rahway, N. J., which is pad mounted to the engine, eliminating hose lines. It uses a resin-impregnated element capable of removing contaminants down to 1 micron, or 39 millionths of an inch. Thus, complete filtration of lube oil is assured by single pass through the full-flow element, which has a rated capacity of 2½ gallons per minute.

Tests show that full-flow filtration cuts over-all engine wear up to 84% over engines without any filter installations. Examination of bearings, cylinders and piston rings after thousands of hours of operation proved wear was reduced to absolute minimum with full-flow filters.

Marine lube oil filtration is particularly important, says Purolator, because of constant high engine loads, high temperatures and heavy condensation. The Micronic element, with up to 10 times the filtering surface and far greater dirt-holding capacity than ordinary types, filters out the dangerous impurities from such operating conditions—sludge, varnish, water condensate and acids. But still the Micronic element does not remove additives from heavy-duty and detergent oils, and owing to its construction, cannot channel, unload or collapse.

Purolator fuel and lube oil filters are used on ocean liners, work-boats and pleasure cruisers. Installations are considered a "must" on tugs and working harbor craft that operate under maximum loads continuously. Heavy-duty and high-speed engines particularly require filters for satisfactory service and longer life.

Purolator filters are available for a wide range of engine types. For help in solving difficult installation or operating problems, Purolator engineers are always available, the Company states.

SAFETY BOOTEE

For wet-floor departments where the regular knee-boot is too clumsy and where rubber shoes get soaked, new 10-inch bootee insures dry feet with a minimum of weight. Patented "Par-Grip" has hundreds of deep, tiny suction cups that grip wet floors like a plunger—help prevent bone-breaking slips and falls.

Entire boot is heavily Neoprene-coated to resist corrosive action of fats and oils. Steel safety toe box is tested to withstand impacts over a ton. Wide top gives plenty of room to stuff pants legs inside. Made by Lehigh Safety Shoe Co., Allentown, Pa.

DUROC RESISTANT ENAMEL

A new finish, "Duroc Resistant Enamel," is claimed by its developers, Hart and Burns, Inc., to give 200% to 300% more wear resistance. Says Earl Huston, Jr., vice president in charge of sales:

"By using a combination of chemical properties that were unavailable in any single product before, our chemists have developed an enamel which dries with a mirror-like finish, has outstanding toughness, exceptional mar resistance and extreme flexibility."

Duroc enamels are suitable for either exterior or interior use and can be applied to concrete, masonry, plaster, metal or wood surfaces with very satisfactory results. For example, as a floor covering, Duroc will not soften, blister, or whiten, even under severe moisture conditions.

Hart and Burns, Inc., Riverside, Calif., are also the developers and manufacturers of such widely used marine and household paints as Navicote and Durahart. They are also exclusive manufacturers of Guntex.

RADAR STEERING

Steering by radar on river towboats, interharbor tugs, and large ships will be aided by a midget electronic automatic pilot recently announced by the Sperry Gyroscope Co.

The new device, called the Lever Pilot, gives these vessels the steering accuracy and "dead-beat" automatic performance of the latest electronic Gyro-Pilot used on the superliner S.S. "United States." It can steer more accurately than the human pilot for longer periods.

Used with radar the electronic midget is expected to reduce time delays during bad weather operation in addition to those already eliminated by radar alone.

The new gyroscopic steering control, which can be attached to the radar console, automatically holds the vessel to any heading selected from the radar indicator. It will hold this heading with less than one-half degree error in average river conditions and approximately one degree error in moderate ocean seas. A gyro-compass supplies accurate heading data from which the lever pilot derives the steering error.

On large seagoing vessels, the lever pilot will be an important auxiliary automatic control for radar navigation. With the lever pilot attached to the radar console, the officer operating the radar will be able to pilot his vessel directly instead of calling out the steering headings to the helmsman.

Although the new lever pilot was developed for use with radar, it has been designed into small space-saving units which can be mounted separately for automatic steering on vessels not equipped with radar.

EBB 'n FLOW

Status of Mexican Fisheries

The total investment of capital in Mexican fishery industries amounted to approximately 250 million pesos (U.S. $29 million) as of December 30, 1951, with considerable expansion since then.

There were at least 36 freezing plants operating in Mexico during 1951—29 on the Pacific Coast and 7 on the coast of the Gulf of Mexico. In addition, there were 27 plants processing sardines, tuna, bonito, Spanish mackerel and abalone for both export and domestic consumption. These processing plants are located in the states of Senora, Sinola, Baja California and Campeche.

Total exports of shrimp to the United States in 1951 amounted to 39,652,640 pounds. One-third of this total was caught in the Gulf of Mexico and the remainder in the Pacific Ocean including the Gulf of California.

U.S.-Canada Halibut Convention

A convention for the "Preservation of the Halibut Fishery of the Northern Pacific Ocean and Bering Sea" was signed in Ottawa last month by representatives of the United States and Canadian governments.

This was the 30th anniversary of the signing of the First Halibut Fishery Convention between the United States and Canada.

Packaged Fish Producers List

A list of producers of packaged fish during 1951 was issued by the service's branch of commercial fisheries recently. It contains the names and addresses of producers of packaged fish in the states of Maine, Massachusetts, Rhode Island, New York, New Jersey, Virginia, North Carolina, South Carolina, Florida, Alabama, Washington, Oregon, California, Pennsylvania (Great Lakes area), Ohio, Michigan, Wisconsin, Illinois, and Minnesota.

Free copies of this list—SL-161, *Producers of Packaged Fish, 1951*—are available from the Division of Information, U. S. Fish and Wildlife Service, Washington 25, D. C.

Enterprise Diesel Meeting

Enterprise Engine & Machinery Co. chose Diablo Country Club near San Francisco as the site for their annual diesel engine sales meeting, where members of the national sales organization recently joined home office personnel for a 3-day session.

Marathon Appointments

Fred Deutsch, recently named frozen food packaging sales manager for Marathon Corporation, Menasha, Wis., has announced the appointment of three regional sales managers and a merchandising manager to assist him in the company's accelerated program of frozen food packaging sales.

They are James A. Turner, Eastern Sales Manager with headquarters in New York City; Thomas J. Schaefer, Central Sales Manager, Chicago; Hugh W. Hicks, Western Sales Manager, San Francisco; and Kenneth G. Houts, Merchandising Manager in the home office.

Russia Curbs British Fishermen

British fishermen will be denied fishing privileges in a 400 mile coastal area in the Barents and White Seas off the Northern Coast of Russia commencing in June 1953. The Russian Government recently gave the required 6 months' notice to end the Anglo-Soviet Fisheries Agreement. This agreement, signed in May 1930, was to run until either party gave 6 months' notice of termination. It allowed United Kingdom-Registered fishing vessels to fish between 3 and 12 miles from Northern U.S.S.R. coasts and their dependent islands.

Fishing Vessel To Be Chartered

The Pacific Oceanic Fishery Investigations (POFI), Honolulu, is contemplating a contract by negotiation for a vessel to perform long-line fishing in Mid-Equatorial waters during the fiscal year July 1, 1953 to June 30, 1954.

Interested parties may obtain copies of the open letter for contract negotiation from U. S. Fish and Wildlife Service, Room 208 Post Office Building, San Pedro, California, Telephone Terminal 2-5354.

Fish Meal and Oil Production

Production of fish oils (exclusive of liver oils) in the United States and Alaska during 1952 amounted to 15,397,567 gallons, a decrease of 14% as compared with 17,872,733 gallons during 1951. The continued failure of the sardine fishery in California and the herring fishery in Alaska were again the outstanding reasons for the over-all decline in fish oil production.

Abalone Cannery In South Africa

An abalone cannery was established recently at Gansbaal on the South African Coast east of Cape Town. The abalone are obtained by divers. Canned abalone is becoming popular among the Chinese in Malaya and other far Eastern countries.

Revised Lists

Recently the service's branch of Commercial Fisheries issued the following revised lists:

SL-108—Firms Canning Salmon Eggs for Bait, 1951.
SL-153—Firms Manufacturing Fish Glue and Isinglass, 1951.
SL-154—Firms Manufacturing Seaweed Products, 1951.
SL-161—Producers of Packaged Fish, 1951.

Free copies of these leaflets are available from the Division of Information, U. S. Fish and Wildlife Service, Washington 25, D. C.

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3 Circulation composed of boat owners, ship yards, ship chandlers, canners, packers, brokers and allied interests.

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5 Readership interest maintained through interesting and informative feature articles and regular departments . . . dedicated to the good of the industry.

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. . . The ONLY commercial fishing magazine published in the State of California

California Produces More Than One-Third of the Annual Seafood Catch of the U.S.

PAN AMERICAN Fisherman

"Business Magazine of the West Coast Fisheries"

(Continued from page 10)

Domestic supplies are large enough to hold civilian consumption of fishery products per capita during the next few months at about the same rate as in the first half of 1952. Cold-storage stocks of frozen fishery products on January 1, says BAE, were record large for that time of year . . . probably will be more than enough to meet domestic needs until the 1953 commercial fishing operations really get going.

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IMPORTS & EXPORTS.--BAE predicts that imports of fishery products, including tuna, very probably will be larger this year than last. But the increase this year likely will not be as big an increase as the one which occurred between 1951 and 1952.

Some further decline in exports of fishery products is anticipated to result from the still smaller exportable supplies of those canned fishery products which are popular in our foreign markets.

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TUNA OUTLOOK.--Washington market-watchers note a continuation in the improvement of the tuna market, especially as far as price is concerned. They expect the West Coast fishing boat owners association to have strong influence toward further stability in the market by preventing heavy marketings of fish during the period of large catches.

Observers here expect a stronger regulation of sailings and a push to have only a certain number of boats at sea during any given period.

Tuna supply and demand for the 1953 season seems to be well balanced. Carryover into the current pack season is estimated at about 2 million cases. The new season's pack is expected to be about the same size as the estimated 9 million cases in 1952.

While nobody here likes to go too far out on a limb in predicting much about the 1953 pack of tuna, many believe privately that the West Coast tuna fish marketing position going into the new season is the best in years. Proposed regulation of sailings by boat owners plus the move to curtail receipts and establishment of orderly marketing likely will exert great influence in keeping the market firm all the way around . . . if these moves are successful.

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JAPANESE TUNA.--The Japanese Ministry of International Trade and Industry is accepting additional applications for exports of frozen and canned tuna. This additional tuna is expected to head east . . . for the United States market.

These new exports will be in addition to 18,000 tons of frozen tuna and 1 million cases of canned tuna Japan shipped before the announcement was made, under the quota system. It is not known at this time just how much additional frozen tuna the Japanese government will permit to be exported, but some unofficial estimates put it at about 3,000 tons more than early quotas.

The Japanese announcement says that the additional canning export quota would amount to about 30% of actual production made by each manufacturer under the previous program. Since most of the canned Jap

tuna production goes into exports, observers estimate the additional export quota will amount to about 300,000 cases.

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FISH MEAL & OIL.--The Fish and Wildlife Service reports that output of fish meal and oil in January was considerably less than it was in the same month a year ago. But while these products from groundfish, herring, menhaden and pilchard fell off considerably, production of meal and oil from tuna and mackerel went up.

Fish meal and scrap went from 742 tons in January 1952 to 1,312 tons last January from tuna and mackerel sources. Tuna and mackerel oils together increased from about 11,000 gallons in January of last year to 55,300 gallons in January 1953.

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BOX-WASHING MACHINE.--Mechanized washing of dirty fish boxes has been pioneered in Scotland by a trawler-owner and fish salesman in a modernized plant at The Shore, Granton. The machine can wash about 1,000 used fish boxes a day, according to a British periodical, The Fishing News.

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SELECTIVE SERVICE.--A manpower policy for the commercial fishing industry was issued by Draft Director Hershey recently. Since the food industry, including commercial fishing and agriculture, is a basic part of the economy, Selective Service has drawn up a special policy for deferment of young men engaged in these pursuits. For detailed information on the new policy, consult your local draft board.

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BOATMAN'S HOLIDAY.--Want to hear about new boats? New fishing techniques on the way? Interested in what other boatmen over the world are talking about? Then you'll be interested in a five-day meeting coming up just announced in Washington by the Food and Agriculture Organization of the United Nations.

The second section of the World Congress of Fishing Boats now has been scheduled to be held at Miami, Fla., November 16-20. The first section of this meeting will be held in Paris, France, October 12-16.

Purpose of holding two sessions of the Congress, according to Dr. Mogens Jul, FAO's senior fisheries technologist, is that "We want to reach the widest possible audience with the news of latest techniques. But neither fisheries experts nor their audience have the time nor the money to travel half way around the world for a single meeting." So . . . what goes on at the Paris meeting will be duplicated at Miami.

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MORE MEXICAN RULES.--Certain banks in Texas holding mortgages or notes against shrimp vessels or trawlers have advised vessel owners that their loans or notes will be declared in default if the shrimp vessels are seized by Mexican authorities closer than 10 miles off the Mexican coast, except in case of emergency for repairs or due to bad weather. Upon violation of this stipulation "our bank shall demand from you payment in full of your note to us."

Mackerel and Anchovies

Pacific mackerel landings at California ports during 1952 totaled 9,253 tons to make the poorest season in the fishery's history, the State Department of Fish and Game reports.

Last year's total catch was less than one-fourth of the 1951 bag of approximately 45,000 tons, a "good" year by recent standards in the widely fluctuating fishery. About 16,000 tons were landed in 1950.

Part of the slack was taken up by increased fishing for the jack mackerel, accepted by many processors as a "Hobson's choice" substitute. A total of 73,625 tons was landed in 1952, compared to about 45,000 tons in 1951.

The peak year for Pacifics was 1935 when 74,000 were landed. Since then the fishery has fluctuated downward to last season's "barrel scraping."

Anchovies amounted to 26,888 tons —highest catch on record—almost three times the previous record of 9,400 tons in 1947.

California Canning

The State of California has grown in 40 years to ranking position as producer of canned foods. Today it turns out almost all the tuna canned in the United States, one-third of the nation's canned fruits and vegetables and a large portion of all canned fish and seafood products.

The canning industry of the Golden State, with its record of volume output and its important contributions to the economic well-being of the state, was recently cited by Louis Ratzesberger, Jr., of Hoopeston, Ill., president of the National Canners Association in addressing the 49th annual directors conference of the Canners League of California.

Recalling a prophecy, written by one of the state's pioneer canners 40 years ago, that California canned foods would attain national prominence, Mr. Ratzesberger pointed out that the canners of California have greatly exceeded these expectations and the opportunities ahead are virtually limitless.

U. S. AND ALASKA PRODUCTION

By Years and by States

During 1950, surveys covering the catch of fish and shellfish in the United States and Alaska were made in all areas. This is the first complete survey of the fisheries of the United States since 1931 reported by the Fish and Wildlife Service.

The 1950 catch of fishery products in all sections of the United States and Alaska totaled 4,884,909,000 pounds valued at $343,876,000 to the fishermen. This represents an increase of 2% in quantity and 1% in value compared with the estimated figures for 1949.

YIELD AND VALUE OF CATCH, 1939-1950

Year	Pounds	Value to the fishermen	Average price per pound
1939	4,443,328,000	$ 96,532,000	2.17c
1940	4,059,524,000	98,957,000	2.44
1941	4,900,000,000	129,000,000	2.63
1942	3,876,524,000	170,338,000	4.39
1943	4,202,000,000	204,000,000	4.85
1944	4,500,000,000	213,000,000	4.73
1945	4,575,500,000	269,900,000	5.90
1946	4,456,000,000	310,000,000	6.96
1947	4,344,000,000	307,600,000	7.08
1948	4,575,000,000	367,000,000	8.02
1949	4,796,000,000	339,000,000	7.06
1950	4,884,909,000	343,876,000	7.04

CATCH BY STATES, 1950

States	Marine Waters and Coastal Rivers		Mississippi River and Tributaries	
	Pounds	Value	Pounds	Value
Alabama	10,988,400	$ 2,122,356	7,885,500	$ 505,067
Arkansas	----------	----------	13,157,200	1,610,060
California	1,338,298,900	81,605,112	----------	----------
Connecticut	20,226,300	2,113,551	----------	----------
Delaware	160,721,200	3,140,727	----------	----------
Florida	118,478,300	15,704,050	----------	----------
Georgia	17,350,800	3,584,389	----------	----------
Illinois	----------	----------	9,064,500	688,222
Iowa	----------	----------	1,979,600	181,406
Kentucky	----------	----------	2,134,000	346,892
Louisian	316,250,100	23,664,540	16,593,600	1,852,962
Maine	356,265,700	14,688,742	----------	----------
Maryland	67,092,200	8,888,241	----------	----------
Massachusetts	591,187,800	40,767,456	----------	----------
Minnesota	----------	----------	13,009,900	1,371,542
Mississippi	84,138,500	3,371,199	7,676,500	1,082,318
Missouri	----------	----------	685,000	72,851
New Hampshire	645,100	218,841	----------	----------
New Jersey	188,623,400	10,200,569	----------	----------
New York	142,340,800	15,502,073	----------	----------
North Carolina	172,338,600	6,800,155	----------	----------
Oklahoma	----------	----------	1,166,700	193,962
Oregon	58,255,800	7,150,952	----------	----------
Rhode Island	38,264,600	2,787,891	----------	----------
South Carolina	14,726,500	2,809,828	----------	----------
South Dakota	----------	----------	2,817,200	112,418
Tennessee	----------	----------	20,528,600	1,428,300
Texas	97,251,300	11,265,207	----------	----------
Virginia	313,799,400	16,118,602	----------	----------
Washington	118,694,700	19,070,491	----------	----------
Wisconsin	----------	----------	9,097,500	658,129
Alaska	482,292,622	31,371,626	----------	----------
Total	4,708,231,022	$322,926,607	105,795,800	$ 10,104,129

California Abalone

The chief of the State Division of Marine Fisheries fears for the future of the abalone in California coastal waters.

After R. S. Croker's gloomy forecast the Senate Fish and Game Committee failed to pass a bill closing commercial abalone fishing until 1956. Croker said, "Well you can write the obituary for abalone now and put a 1955 dateline on it."

He suggested the abalone would go the way of the sardine unless conservation measures are instituted. He said the sardine industry once opposed restrictive legislation but now is "crying for it because there are no more sardines."

Others said the abalone is not disappearing and suggested opening the area north of San Francisco, which has been closed to commercial diving.

Puerto Rico's Fishing Industry

(Continued from page 13)

There are 4,473 pots in operation with a total value of $20,128 to the fisherman. Of 875 boats or gear-owning-fishermen, only 387 or 44% use fish pots. Seventy-three per cent of the sail boats, 9% of the row boats, and all the motor boats engaged in pot fishing, show an average number of 12.7, 10.8 and 18 pots respectively.

Fishpots are constructed of one-inch mesh galvanized chicken wire over a light frame of mangrove. They range from 4 to 6 feet in length, 2 to 4 feet in width, and 18 inches to 2 feet in height. The fishermen off Mona Island use bigger pots as large as 8 x 5 x 2 ft., hauled on board by a winch.

Annual Production

Annual production by latest count amounted to 4,225,000 pounds of fresh fish and 466,000 pounds of live lobsters, valued at $615,002 and $87,333 respectively to the fisherman. In addition, 562,000 pounds of grouper, gutted and beheaded, were landed by two modern fishing vessels off the Galapagos Islands of Ecuador by the fleet of Luis C. Bonnet and Co.

In Puerto Rico, fish is sold by classes, depending on the size and species of fish. Any fish weighing over 1½ pounds and belonging to the families Sphyraenidae, Carangidee, Lutjanidee, Scombridae, Serranidae and Mugilidee are considered first class; any fish of the groups mentioned but weighing less than 1½ pounds are second class. This includes also bone fish, goat fish, snook, and tuna irrespective of size. The parrot, butterfly, hog, spade, trigger, tank and mojarras are considered third class fish, whatever their size. First and second class fish are gutted on the boats. Only the larger specimens of the third class are gutted.

The Fajardo Fishing Center, which absorbs practically all the fish production originating in Vieques and Culebras Islands, is the only fish business in Puerto Rico that keeps reliable records on production. Statistics of the fish landings made at the Center's cold storage reveal that the two islands sold 105,873 pounds of fish on the mainland in one year.

Information obtained from 874 fishermen reveals that 311 (35.5%) of them sell the catch to wholesalers; 475 (54%) to fish peddlers; 73 (8.3%) directly to the consumers thus peddling the catch themselves; and 15 (1.7%) to grocery stores.,

Of the annual catch, wholesalers handled 2,577,285 pounds or 61%; peddlers 1,605,500 pounds or 37.5%; while grocery stores purchased directly from the primary producer the remaining 42,215 pounds, which represents 1%.

There are 26 wholesalers engaged in the fresh fish trade. Their refrigeration facilities consist of 36 ice chests and 5 electric freezers with a total holding capacity of 13,100 pounds of fish. On the basis of storing capacity, fish is kept an average of 3 days before it reaches the retailers. Twelve fish wholesalers reported owning 20 trucks for the distribution of the product to consuming centers. The remaining 6 wholesalers rented trucks to perform the same service.

The retail trade in fresh fishery products is handled by grocery stores with refrigerated displays and by market stalls. In addition, there are 6 sea food stores in San Juan and Ponce that retail fish to hotels, restaurants, grocery stores and hospitals. Some peddling is still done in San Juan, but fish is carried in insulated carts and ice is used for preservation.

Peddling is most common in the small coastal towns where the distribution of fish is not well organized. Most of the fish handled by peddlers is sold within 10 hours of being caught, thus reaching the consumer in fairly fresh condition.

A fish business established in San Juan by Luis Bonnet handles the catch obtained by two modern refrigerated boats operating off the Galapagos Islands. The 1951 catch of 562,000 pounds of frozen, gutted and beheaded grouper represents a total of 7 trips for the two vessels. At the pier the boats unload the fish into insulated trucks to be conveyed to a cold storage plant with capacity for 300,000 pounds of fish.

Three electric scalers and three cutters are used for scaling and cutting the fish. Fish are cut in steaks and packed in 10-pound waxed-carton boxes which are delivered to customers by insulated trucks. About 80% of the fish is sold in San Juan the remaining 20% in Ponce and Mayaguez.

Spiny Lobster Fishery

Spiny lobster (*Panulirus Argus*) fishery in Puerto Rico has gradually increased. Latest figures show an annual catch of 466,760 pounds (approximately 200,000 live lobsters), valued at $87,333 to the fishermen. The total production is locally consumed fresh.

Puerto Real of Cabo Rojo and Culebras Island are the most important lobster producing centers. Their contributions to the catch amounted to 122,008 and 94,196 pounds respectively, or 46% of the total production. Twenty-one other fishing localities contributed the remaining 54%.

Most of the lobster fishing is done with metal wire traps (nasas), which run from 3 to 6 feet in length, are 3 feet wide and 18 inches high. In general these traps have the form of a broad arrowhead and have one or two elbow-shaped funnels leading into the center. Once inside the trap, relatively few lobsters are able to escape by finding the hole at the small lower end of the funnel. Lobsters are also taken at night by torching. In this method bully nets and wooden pinning forks are used.

Lobsters are brought alive to the wholesalers' establishments where they are weighed and kept in wells (viveros) until the quantity justifies a shipment. The wholesaler ships the lobsters to the retailers alive in damp jute sacks. The retailers sell the product either alive or boiled. Much boiled lobster meat is picked from the shell and sold for the preparation of salads.

Market value varies from 35 to 55 cents per pound for live lobster, and 50 to 75 cents per pound for boiled lobster, according to season and distance from production centers. Price obtained by the fishermen averages 18.7c per pound.

Canning Industry

The only commercial canning plant on the island is that of R. C. O. Frozen Foods, Inc., established in January, 1952, at Bayamon. Because of the good market for shrimp in the United States the plant packs and ships 20 tons weekly to the mainland.

This production, however, is only half of the present capabilities since the shrimp comes from Campache, Mexico, off the Gulf. The two owners, Rudy Warner and Antonio F.

Garary, are planning to organize operations for their own shrimp hauls in the waters of the Antillas and South America. They have purchased the ship, "Queen of the Caribbean," with a capacity of 120,000 pounds which is expected to serve as a base for a fleet covering those waters.

In processing, the heads are cut off, the shrimp frozen and breaded and put in plastic baskets for shipment by boats. The company buys more than 1,000 pounds of bread daily for the granulating and carries an inventory of 400,000 plastic baskets.

Plans are also under way for the establishment of a tuna fish canning factory on the south side of the island by two Americans from the mainland, it was recently reported. *

Shrimp Industry Meeting

"We've all enjoyed a great year, but we must look ahead and plan for the future," Carlton Crawford, president of the Shrimp Association of the Americas told Association members at their recent quarterly meeting. About 165 members and others interested in the shrimp business attended this meeting, which was held at the Roosevelt Hotel in New Orleans.

While everyone recognized that 1952 was one of the greatest years in the shrimp business, the principal discussion centered around the future of the industry.

John Mehos, chairman of the Advertising and Publicity Committee, outlined the importance of last year's promotion program to the stability of the shrimp industry. His talk was followed by an illustrated demonstration of the Advertising and Publicity Program by Murray Wheeler, director of public relations for the National Fisheries Institute.

Standardized Fish Products

A revolutionary new method in which ocean fresh fish are processed to meet the sizes and shapes desired by today's homemakers, rather than following the physical limitations of the fish itself, as has been the case in the past, has been revealed by officials of the SeaPak Corporation, St. Simons Island, Georgia.

This "new dimension" means that housewives may buy at their frozen food cabinets any number of species of fish processed into several convenient standard shapes. These units will be of unvarying weight, thickness, size and quality as contrasted to the present widely varied fillets which result from direct processing the run-of-the-net. The products are kitchen-ready for cooking without further preparation or thawing and are skinless and boneless.

Huge Tuna Brought In

Massive tuna, ranging in weights from 150 to 350 pounds, recently were brought to port in San Diego aboard the State Fish and Game Division Research Ship N. B. Scofield from deep water west of the Galapagos Islands equatorial fishing grounds.

Caught in water from 80 to 100 feet deep, the tuna may be from the breeding stock for the fish caught by San Diego tuna clippers, said scientists aboard the vessel. The expedition was co-sponsored by the Inter-American Tropical Tuna Commission and Scripps Institute of Oceanography.

These large tuna were the first of their kind ever taken in the Eastern Pacific, according to Dr. M. B. Schaefer, tuna commission director.

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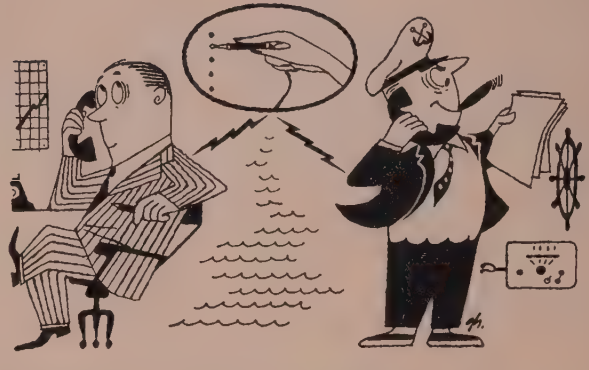

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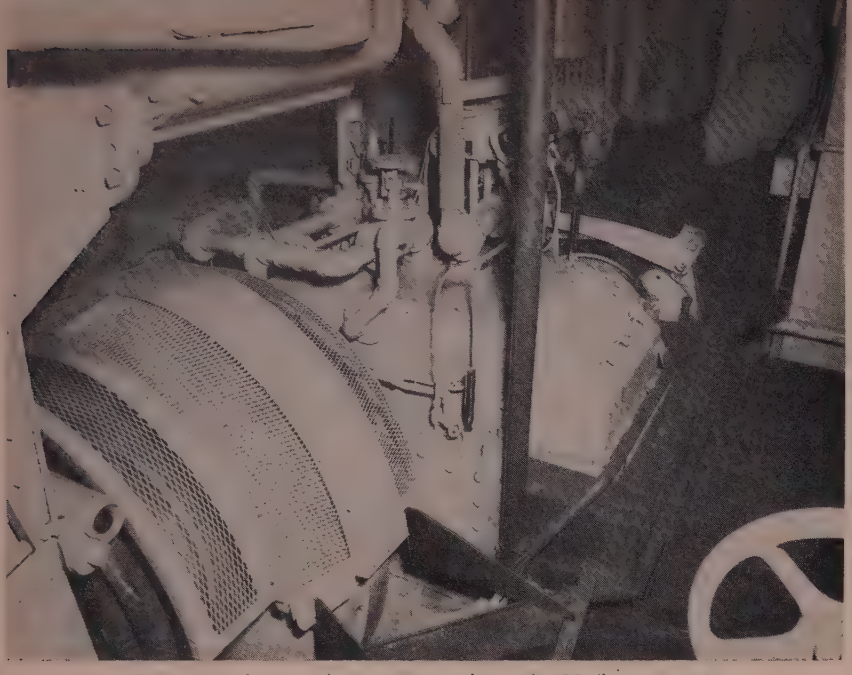


This Westinghouse reduction gear reduces the RPM's on a ratio of 2.216 to 1 before releasing the power to the propeller shaft.

The Western Ace

(Continued from page 17)

The Model 20-B, two speed recorder of 530 feet or 530 fathoms, was designed originally as a portable unit to be used in the speed boat, or tenders, for locating bait, and when not in use on the tenders can be installed simply aboard the clipper for navigation in waters up to 530 fathoms in depth.

Another new wrinkle is the use of two speed boats, or tenders, aboard the Western Ace. Normally a tuna clipper carries one tender and two skiffs for getting bait. On the Western Ace, the use of two powered tenders, plus the larger and smaller skiffs were expected to materially facilitate obtaining bait with the one tender equipped with depth sounding equipment first locating the bait school and notifying the clipper by radio.

Proof of the practicality of this application aboard the Western Ace is the fact she reported a full load of bait in less than one week's time before heading out to the tuna fishing banks.

The Western Ace is equipped with its own fresh water making equipment, a vital necessity where trips may run to ten thousand miles and four months or longer in duration. This equipment has become virtually standard on many of the larger clippers in recent years.

With her 500-watt radio transmitter, manufactured by Al Henderson, of Pacific Electronics in San Diego, the Western Ace has the finest specialized radio equipment. Henderson has been eight years in developing sets especially adapted to the specific needs of the fishing fleet. Presently 477 Henderson radios are installed in vessels of the Pacific Coast fishing fleet.

The Western Ace carries 8,000 scoops of bait, more than any other vessel in the fleet; a tribute, by the way, to the design genius of Jim Petrich. With four regular bait wells aft, she also has two additional wells amidships. All except the extreme aft well can be refrigerated to carry frozen fish, thus raising her complete hold capacity considerably.

An inter-communication system reaches from the skipper's cabin to the bridge and to the crow's nest atop the main mast. Telephones provide communication with the bridge, engine room, and galley.

Another unique feature of this vessel is found in the two powered booms that are built to swing underneath the rigging for use both fore and aft of the mast, and they can be operated simultaneously. In other words, a speed boat can be brought aboard on one side forward of the mast, while the scout plane is being hoisted to the bait tank canopy on the other side of the ship.

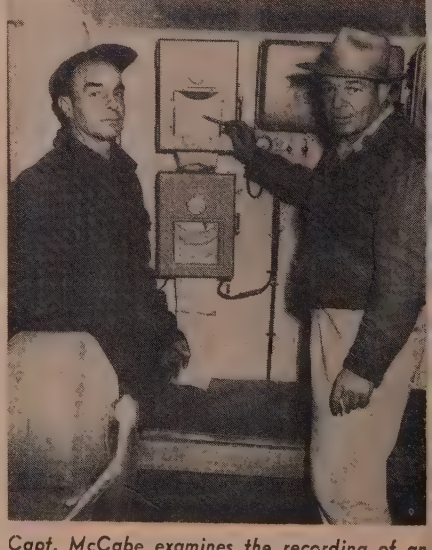
Crew accommodations include one head and shower on the main deck, another on the raised deck, and the same equipment in the skipper's cabin. The galley will seat 22 persons at one time. The Western Ace is believed to be the only tuna clipper afloat equipped with a galley stove having two ovens for baking, something of a rare novelty at sea.

Complete with chapel, the Western Ace is undoubtedly the finest-equipped tuna fishing vessel in the fleet today, and certainly she is the largest; a factor which pays tribute to the far-sighted wisdom of the men of Western Boat Building Company who spent their own money to build the first big tuna clipper, and today, 30 years later, still maintain that lead.

Western Boat Building Company is headed today, as it was in the beginning back in 1918, by Martin Petrich, Sr. In the ensuing 35 years five sons have joined the Company and the part they play in the business is unique for any organization.

Hervey, oldest of the sons, is fleet operator for the 12 tuna clippers in which Western is whole or part owner in the fishing fleet. Allen has charge of all repair work and the manufacture of the Fairliner pleasure cruisers and the Fairliner tuna clipper tenders. Martin, Jr., is yard superintendent at the Tacoma works. James F. is the naval architect responsible for the design conversion of the Western Ace and other vessels from the Western's yards. John A. is a practicing attorney and the attorney for Western Boat Building Co.

This seems to pretty well sum up the Petrich family and the Western Boat Building Company . . . with the Western Ace standing today as another proof of the success of this company, and of the belief of these men in the future of the tuna and salmon fishing industries. *



Capt. McCabe examines the recording of an Ekolite depth sounder as crew member Tony Boulart looks on.

Commercial Catch in 1952

The estimated catch of fish and shellfish in the United States and Alaska during 1952 declined slightly in both quantity and value from that of 1951, according to a report by Albert M. Day, Director of the Fish and Wildlife Service.

The 1952 catch is estimated to have been 4.3 billion pounds, valued at $335 million to the fishermen. This was approximately 100 million pounds and $10 million less than during the previous year.

The decline in catch was due to smaller landings of California pilchard, Alaska herring, salmon, and ocean perch. The production of pilchard is the lowest it has been since it first became a major fishery. The decreases in these four important fisheries were only partially offset by increased landings of menhaden and Maine herring. The catch of menhaden (1.3 billion pounds) was the highest ever made.

The 1952 pack of canned fish is expected to be slightly less than last year's total of 800 million pounds. Decreased production of canned California sardines and salmon was nearly offset by increased packs of Maine sardines, Pacific mackerel, and jack mackerel, and record packs of tuna and anchovies.

The record pack of tuna was due in a large measure to increased imports of frozen tuna which were used for canning as the domestic catch of tuna was about the same as in 1951 and considerably less than in 1950.

National Fisheries Institute Convention

The Hon. Douglas McKay, Secretary of the Interior, will give the principal address at the eighth annual convention of the National Fisheries Institute in April, Charles D. Alhadeff, president of the Institute, has just announced. About 900 members of the fishing and allied industries are expected to attend the convention at the Shoreham Hotel in Washington, D. C., April 12 through 15.

Another important feature is the Congressional Dinner, Sunday evening, April 12. Congressmen and their wives will be guests of members of the Institute.

Secretary McKay is to address the convention at the general luncheon on Monday, April 13. He will be introduced by T. F. Sandoz, president of the Columbia River Packers Association, Astoria, Oregon.

"More Business—Come and Get It" is the theme of the Merchandising Session, scheduled for Tuesday morning, April 14. The moderator will be John Logan, president of the National Association of Food Chains.

Other events include the Old Timers Annual Dinner, exhibits of fishery products, election of officers and a dinner dance.

Minimum Net-Mesh Size

The effective date for a proposed minimum net-mesh size for the New England haddock fishery has been postponed by the U. S. Fish and Wildlife Service. Originally the effective date was on or about March 15, 1953.

It was deemed advisable to postpone this date as enough of the larger-mesh nets would not be available to supply all vessels requiring them. The new date will be announced later. Purpose is to allow an adequate escapement of immature haddock.

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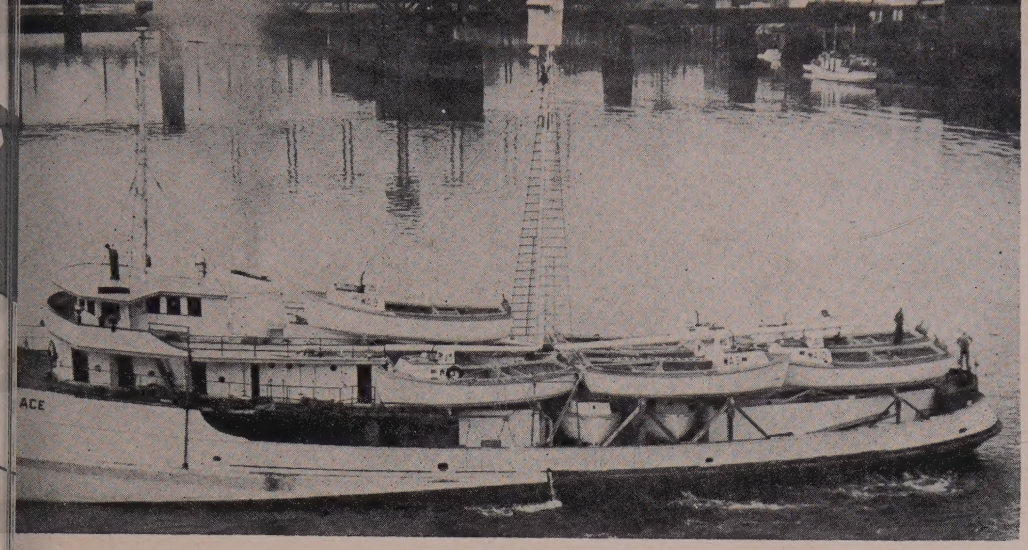


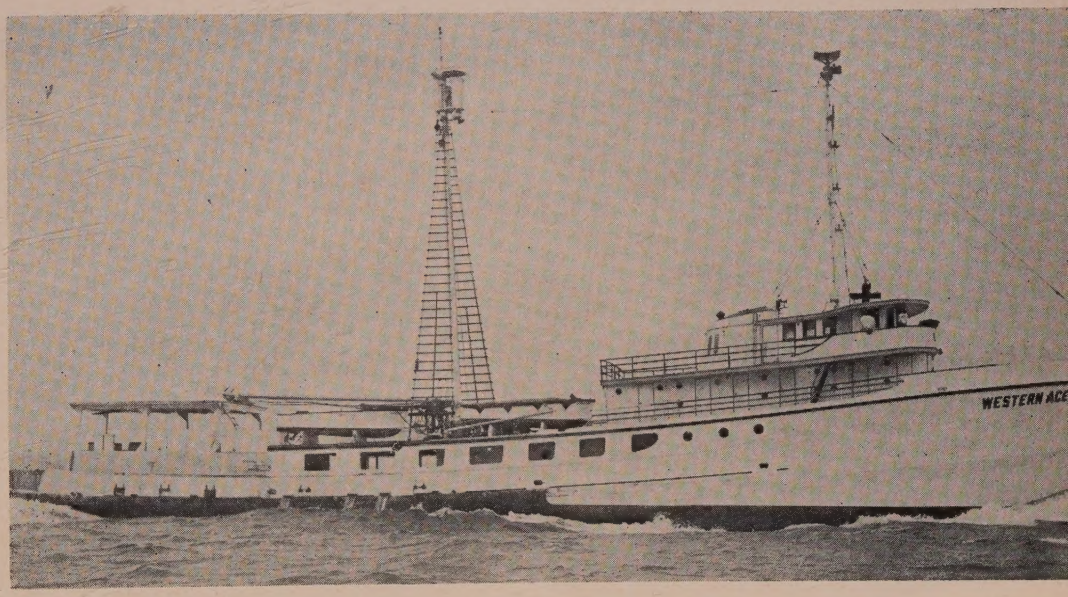
From Salmon to Tuna

In the Summer of 1952 . . .

After considerable modification and installation of refrigeration equipment, the Petrich family of the Western Boat Building Co., in combination with the American Packing Co., sent the Western Ace, a converted ATR, north to Bristol Bay. Aboard were 10 Western Fairliner gillnet boats which caught sockeye salmon in the northern waters and returned them to the freezership Western Ace for freezing. After 18 days of fishing, the Western Ace came south with 137,000 salmon, which she discharged at the American Packing Co. plant in Anacortes for canning. The vessel's worth in the salmon industry had been proved.

Now in the Spring of 1953

Again the Petriches have bid the Western Ace "goodbye." This time she's a much different looking ship. With the best of equipment, including two Western Fairliner tuna tenders, she has headed south to take on another kind of fish—tuna—for freezing in her holds. Her size—169 feet, with capacity of 630 tons—is the largest tuna clipper in the industry. With other Petrich-operated clippers, including the Mary E. Petrich (largest and fastest tuna clipper built from the ground up for the purpose), the Western Ace will play an important role in supplying American tables with more and better tuna.



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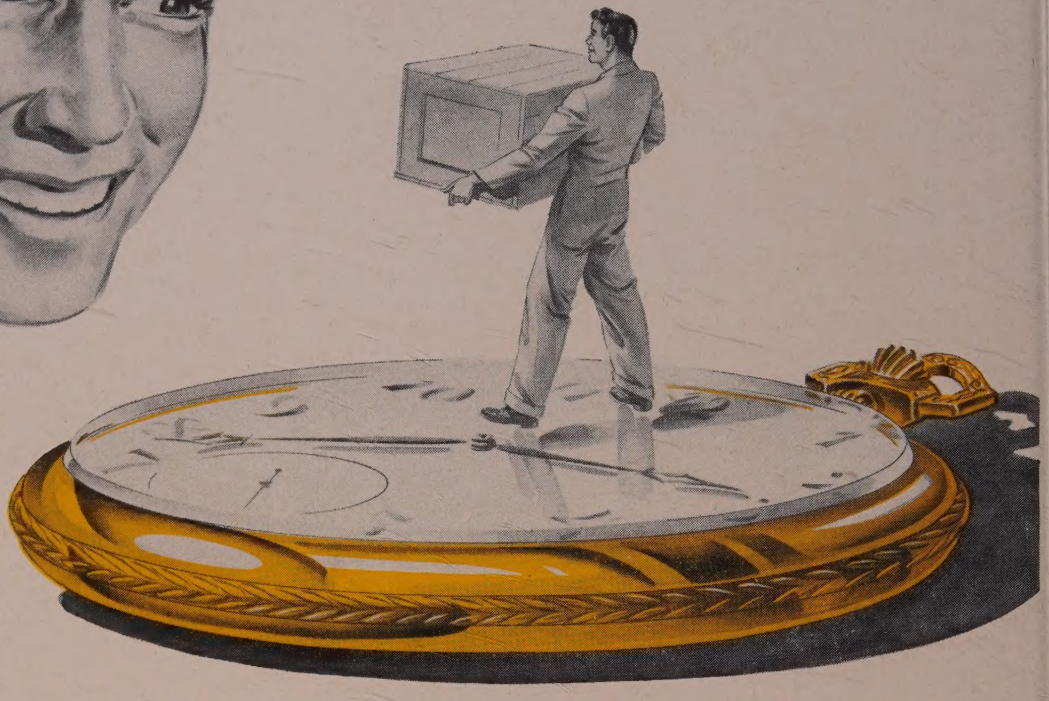

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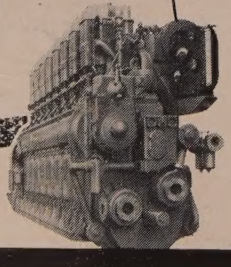

Take the case of this "hurry-up" call from Venezuela, for example—

On January 9th at 10:30 A. M. this cable was handed to M. T. Prendergast, ENTERPRISE Manager of Service Parts in San Francisco:

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